Tel: 732-572-4743 fax: 732-572-6294 www.westonandsampson.com



April 21, 2014

Ms. Grissel V. Diaz-Cotto Emergency and Remedial Response Division United States Environmental Protection Agency Region II 290 Broadway, 19th Floor New York, NY 10007-1866

Re:

March 2014 Discharge Monitoring Report Leachate Treatment Plant, Operable Unit 1 Kin-Buc Landfill Superfund Site

Dear Ms. Diaz-Cotto:

Please find enclosed the March 2014 Discharge Monitoring Report (DMR) for the Leachate Treatment Plant of Operable Unit One at the Kin-Buc Landfill Superfund Site.

Weston & Sampson Services, Inc. would like to confirm the following:

- Effluent parameters sampled throughout the month were within permitted limits.
- Quarterly Bioassay results were >100%.

Should you have any questions concerning this DMR or the Treatment Plant, please contact me at your earliest convenience at the Kin-Buc site.

Very truly yours.

Weston & Sampson Services, Inc. on behalf of SCA Services, Inc.

Plant Manager

Enclosure

Cc: Martha Goodwin - NJDEP

> Stephen Joyce - SC Holdings, Inc. Mark Devine - SC Holdings, Inc.

John A. Bocchino, Jr. - Weston & Sampson Services, Inc.

294328

# NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER QUALITY

### MONITORING REPORT - TRANSMITTAL SHEET

|   | Ę  | NJPDES NO.  NJ Permit Equivalent                           | REPORTING PERIOD  M o. Y_r.  | <u>( r. </u>                     |
|---|--|--|--|----------------------------------|
| PERMITTEE:  | Name:  | SCA Services, Inc.   |  |                                  |
|   | Address:   | 383 Meadow Road  |  |                                  |
|   |  | Edison, New Jersey 08817                                   | 7  |                                  |
| FACILITY:   | Name:  | Kin-Buc Landfill   | The second of th |                                  |
|   | Address:   | 383 Meadow Road  |  |                                  |
| ,   |  | Edison, New Jersey 08817                                   | *  |                                  |
|   | Telephone:   | 732-572-4743   |  |                                  |
| SLUDGE REPORTT-VWX-010A WASTEWATER R                              | T-SANITARY<br>T-VWX-008 T-\<br>)-1<br>T-INDUSTRIAL<br>_ T-VWX-010B | ∙wx-009  | Operating Exceptions  DYE TESTING  TEMPORARY BYPASSING  DISINFECTION INTERRUPTION  MONITORING MALFUNCTIONS   | YES NO X X X                     |
|   | 1-4447-012-  | **************************************                     | UNITS OF OPERATION   | X                                |
| GROUNDWATERT-VWX-015(A,BELECTRONIC                                | ) T-VWX-016 _  | T-VWX-017  | OTHER  | _ <u>x</u>                       |
| NPDES DISCHAR   |  |  | (Detail any "Yes" on reverse side in a   | appropriate space.)              |
|   |  | •  | NOTE: The "Hours Attended at Plar this sheet must also be completed.   | t <sup>n</sup> on the reverse of |
| or supervision in a<br>or those persons d<br>and belief, true, ac | ccordance with a s<br>irectly responsible<br>curate, and comple    | ystem designed to assure my for gathering the information, | nt and all attachments were prepared under inquiry of the person or persons who manag the information submitted is, to the best of managinary significant penalties for submitting false informs.  | e the system<br>ny knowledge     |
| LICENSED OPER   | ATOR   | 1  | PRINCIPAL EXECUTIVE OFFICER DULY AUTHORIZED REPRESENTA   |                                  |
| Name (Printed) Grade & Registry N Signature                       | Glenn Grieb<br>No. N-4; 002127                                     | Heretil  | Name (Printed) Glenin Grieb Title (Printed) Plant Operation Signature  | s Mahagel                        |

| DateApril 21, 2014                    |             |                 | Date         | <u> </u> | Apr   | ril 21       | 1, 20   | )14         |                |          | . 13.7 <u>.</u> 5                       |         |          |                 |                 |
|---------------------------------------|-------------|-----------------|--------------|----------|-------|--------------|---------|-------------|----------------|----------|---|---------|----------|-----------------|-----------------|
|                                       |             | ٠.              |              |          |       |              |         |             |                |          |   |         |          |                 |                 |
| OPERATING EXCEPTIONS DETAILE          | <u>D</u>    |                 |              |          |       |              |         | ٠           |                |          |   |         |          |                 |                 |
|                                       |             |                 |              |          |       |              |         |             | <del></del>    |          |   |         | · · ·    |                 |                 |
|                                       | . 10 7.0    |                 |              |          |       |              |         | **          |                |          | - · · · · · · · · · · · · · · · · · · · |         |          | a               | 7 7 8 8 8 8 8 8 |
| · · · · · · · · · · · · · · · · · · · |             | · · · · · ·     |              |          |       |              |         |             |                |          |   |         |          |                 |                 |
|                                       | <del></del> |                 |              |          |       |              |         | <del></del> | •              |          |   |         | 7        |                 |                 |
|                                       |             |                 |              |          |       |              | •       |             |                |          |   |         |          |                 |                 |
|                                       | * .         |                 |              |          | 20.00 | Fib. 6 4 4 4 |         |             | and the second |          |   |         |          |                 |                 |
|                                       |             |                 |              |          |       |              |         |             |                |          |   |         |          | M - ALE TO 1000 | Pour Market 1   |
|                                       |             |                 | <u> </u>     |          |       |              |         |             |                |          |   |         |          |                 | <u> </u>        |
| HOURS ATTENDED AT PLA                 | ANT         |                 | MC           | ONTH     | 1     | 0            | 3       | - 100       | YEA            | \R       | 1                                       | 4       |          |                 |                 |
| Day of Month Licensed Operator        | _           |                 | 3 4          |          | 8     | 7            | 8       | 9           | 10<br>8        | 11<br>8  | 12<br>8                                 | 13<br>7 | 14       | 15<br>4         | 16<br>2         |
| Others                                | 0           | 4 <i>1</i> 18 1 | 6 16<br>9 20 | 16       | 16    | 16           | 8<br>24 | 4<br>25     | 16<br>26       | 10<br>27 | 6<br>28                                 | 8<br>29 | 12<br>30 | 0<br>31         | 0               |
| Licensed Operator Others              | 8           | 5 (             | 8 8          | 0        | 0     | 0            | 8       | 8           | 8              | 8        | 8                                       | 0       | 0        | 9               |                 |

NAME: **ADDRESS**  SCA SERVICES, INC. **383 MEADOW ROAD** 

**EDISON, NEW JERSEY 08817** 

**FACILITY** LOCATION KIN-BUC LANDFILL **EDISON, NEW JERSEY** CARL JANUSZKIEWICZ

#### NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM DISCHARGE MONITORING REPORT

NJ PERMIT EQUIVALENT 001 PERMIT NUMBER DISCHARGE NUMBER MONITORING PERIOD YEAR MO DAY YEAR MO DAY

03

31

14

| PARAMETER  |                        | Q                                       | UANTITY OR LOADING  |                                   |                           | QUALITY OR CONCENTRA                    | TION                |             | NO.<br>EX   | FREQUENCY<br>OF | SAMPLE<br>TYPE |
|--|------------------------|---|---|-----------------------------------|---------------------------|---|---------------------|-------------|-------------|-----------------|----------------|
|  |                        | AVERAGE                                 | MAXIMUM   | UNITS                             | MINIMUM                   | AVERAGE                                 | MAXIMUM             | UNITS       |             | ANALYSIS        |                |
| FLOW   | SAMPLE<br>MEASUREMENT  | 0.020237                                | 0:030147  | MGD                               | ****                      | ****                                    | , <del>444444</del> | ***         | ***         | continuous      | flow meter     |
|  | PERMIT<br>REQUIREMENT  | REPORT                                  | ONLY  |                                   |                           |   |                     |             |             | continueus      | flow meter     |
| рН   | SAMPLE<br>MEASUREMENT  | *****                                   | ****  | ***                               | 7.60                      | ******                                  | 8.31                | S.U.        | 0           | 1/week          | greb           |
|  | PERMIT<br>REQUIREMENT  | *************************************** | (**********   |                                   | 6.0                       | *************************************** | 9.0                 |             | ,           | weekly          | grab           |
| PETROLEUM HYDROCARBONS                                       | SAMPLE<br>MEASUREMENT  | *****                                   | ****  | ***                               | ****                      | 0.44                                    | 0.5                 | mg/i        | 0           | 2/month         | grab           |
|  | PERMIT<br>REQUIREMENT, | ******                                  |   | 100                               |                           | 10                                      | 18                  |             | ,<br>,<br>, | 2/month         | grab           |
| COD  | SAMPLE<br>MEASUREMENT  | 15.57                                   | 17.59   | kg/day                            | *****                     | 192                                     | 198                 | mg/l        | 0           | 2/month         | comp.          |
|  | PERMIT<br>REQUIREMENT  | REPORT                                  | ONLY  |                                   | ******                    | REPORT                                  | ONLY                |             | :           | 2/month         | comp           |
| BOD  | Sample<br>Measurement  | ****                                    | *****   | ***                               | *****                     | 1.70                                    | 1.70                | mg/l        | 0           | 2/month         | comp.          |
|  | PERMIT<br>REQUIREMENT  | 1                                       |   | 1                                 | energia.                  | 56                                      | 220                 |             |             | (2/mönth        | comp           |
| TOTAL SUSPENDED SOLIDS                                       | SAMPLE<br>MEASUREMENT  | 0.18                                    | 0.23  | kg/day                            | ******                    | 1.95                                    | 2.50                | mg/l        | 0           | 1/week          | comp.          |
|  | PERMIT<br>REQUIREMENT: | REPORT                                  | ÖNLY  |                                   | は一個ない。                    | 30                                      | 45(1)               |             |             | weekly          | comp           |
| DISSOLVED OXYGEN   | SAMPLE<br>MEASUREMENT  | ******                                  | *****   | ***                               | 5.44                      | *****                                   | ****                | mg/l        | 0           | 1/week          | grab           |
|  | PERMIT,<br>REQUIREMENT |   | *******   |                                   | 4/0 MIN.<br>Instantaneous | <b>/***</b> **                          |                     |             |             | weekly          | grab           |
| NAME/TITLE PRINCIPAL EXECUTIVE OF                            | FICER                  | 1 ' ' '                                 | I have personally examined and I  |                                   |                           |   |                     |             | TELEPHO     | NE              | DATE           |
| Glenn Grieb<br>Project <sup>,</sup> Manager                  |                        | the information, I believe the subr     | my inquiry of those individuals imm<br>mitted information is true, accurate<br>submitting false information, inclu<br>th A 33 U.S.C. 1319 | e, and complet<br>ding the possil | e. I am aware that        | SIGNATURE OF PRINCIPAL                  | Hub                 | 732<br>AREA | 572-474     | 3               | 14 04 21       |
| TYPED OR PRINTED COMMENTS AND EXPLANATIONS OF ANY VIOLATIONS | <del></del>            | 1 '                                     | or maximum imprisonment of betw   | •                                 | •                         | OFFICER OR AUTHORIZED                   | ,                   | CODE        | NUM         | BER             | YEAR MO DAY    |

03

01

NAME **ADDRESS**  SCA SERVICES, INC. 383 MEADOW ROAD EDISON, NEW JERSEY 08817

FACILITY LOCATION ATTN:

KIN-BUC LANDFILL EDISON, NEW JERSEY CARL JANUSZKIEWICZ

# NATIONAL POLLUTANT DISCHARGE ELIMINATION:SYSTEM DISCHARGE MONITORING REPORT

NJ PERMIT EQUIVALENT PERMIT NUMBER

001 DISCHARGE NUMBER

MONITORING PERIOD YEAR MO DAY YEAR MO DAY 14 03 01 14 03 31

|                                |                        |   |  |                   |   |                      |             | -           |           |                 |                |
|--------------------------------|------------------------|---|--|-------------------|---|----------------------|-------------|-------------|-----------|-----------------|----------------|
| PARAMETER                      |                        | QI  | UANTITY OR LOADING   |                   | ·                                       | QUALITY OR CONCENTRA | TION        |             | NO.<br>EX | FREQUENCY<br>OF | SAMPLE<br>TYPE |
| •                              |                        | AVERAGE   | MAXIMUM  | UNITS             | MINIMUM                                 | AVERAGE              | MAXIMUM     | UNITS       |           | ANALYSIS        |                |
| BENZENE                        | SAMPLE<br>MEASUREMENT  | <0.0000285  | <0.0000494   |                   | *****                                   | 0.40                 | 0.72        | ug/L        | 0         | 2/month         | grab           |
|                                | PERMIT REQUIREMENT     | 0.009   | 0.02   | kg/day            | *************************************** | 57                   | 134         |             |           | 2/month         | grab           |
| HLOROBENZENE                   | SAMPLE<br>MEASUREMENT  | <0.0000179  | <0.0000254   | kg/day            | ******                                  | 0.2                  | 0.4         | ug/L        | .0        | 2/month         | grab           |
|                                | PERMIT<br>RÉQUIREMENT  | 0.022   | 0,058  |                   | *******                                 | 142                  | 380         |             |           | 2/mortin        | grab           |
| 1,1 DICHLOROETHENE             | SAMPLE<br>MEASUREMENT  | <0.0000108  | <0.0000122   | kg/day            | ******                                  | <0.13                | <0.13       | ug/L        | 0         | 2/month         | grab           |
|                                | PERMIT.<br>REQUIREMENT | a 0.003   | 0.009  |                   |   | 22                   |             |             |           | # 2/month       | grab           |
| ETHYLBENZENE                   | SAMPLE<br>MEASUREMENT  | <0.0000081  | <0.0000094   | kg/day            | ******                                  | <0.10                | <0.10       | ug/L        | -0        | 2/month         | grab           |
|                                | PERMIT: REQUIREMENT:   | 0.022   | 0.068  |                   | *************************************** |                      | 380         | #           |           | 2/month         | greb           |
| TETRACHLOROETHYLENE:           | SAMPLE<br>MEASUREMENT  | <0.0000081  | <0.0000094   | kg/day            | *******                                 | <0.10                | <0.10       | ug/L        | 0         | 2/month         | grab           |
|                                | PERMIT REQUIREMENT     | 0.008   | 0.025  |                   | **************************************  | 152                  | 164         |             |           | 2/month         | grap           |
| TOLUENE                        | SAMPLE<br>MEASUREMENT  | <0.0000551  | 0:000961   | kg/day            | ******                                  | 0.78                 | 1.40        | ug/L        | .0        | 2/month         | grab           |
|                                | PERMIT<br>REQUIREMENT  | 0.004   | l ogr  |                   |   | 28                   |             |             |           | 2)month         | prab           |
| ,2-TRANSDICHLOROETHYLENE       | SAMPLE<br>MEASUREMENT  | <0.0000108  | <0.0000122   | kg/day            | ******                                  | <0.13                | <0:13       | ug/L        | 0         | 2/month         | grab           |
|                                | PERMIT<br>REQUIREMENT  | 0.004   | 0.009  | •                 | ********                                | 25                   | A 80        |             |           | 2/month         | grab           |
| NAME/TITLE PRINCIPAL EXECUTIVE | OFFICER                | 4   | personelly examined and I am familiar w  |                   |   | 71 4                 | 71,         |             | TELEPH    | IONE            | DATE           |
| Glenn Grieb<br>Project Manager |                        | submitted herein, and based on my inquite information, I believe the submitted there are significant penatics for submit imprisonment. See 18 U.S.C. 1001 & 3 | utry of those individuals immediately resp<br>information is true, accurate, and completing false information, including the pos-<br>13 U.S.C. 1319. | ets. I am aware i | that                                    | SIGNATURE OF PRIN    | MA CHANGE   | 732<br>AREA | 572-474   | 3               | 14   04   21   |
| TYPED OR PRINTED               |                        | Include fines up to \$10,000 and or maid  | imum imprisonment of between 8 month   |                   | - Indiana inay                          | OFFICER OR AUTHO     | RIZED AGENT | CODE        | NU        | JMBER           | YEAR MO DAY    |

NAME SCA SERVICES, INC. ADDRESS 383 MEADOW ROAD

EDISON, NEW JERSEY 08817

FACILITY LOCATION ATTN: KIN-BUC LANDFILL EDISON, NEW JERSEY CARL JANUSZKIEWICZ

# NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM DISCHARGE MONITORING REPORT

|                                       |                       |   |   |                    | 1.4 1 00 1 01   | .J   | 74 140 141   | -d   |           |                 |        |                |
|---------------------------------------|-----------------------|---|---|--------------------|---|--|--------------|--|-----------|-----------------|--------|----------------|
| PARAMETER                             |                       | ٥   | UANTITY OR LOADING  |                    |   | QUALITY OR CONCENTRA                           | ATION        |  | NO.<br>EX | FREQUENCY<br>OF |        | SAMPLE<br>TYPE |
| •                                     |                       | AVERAGE   | MAXIMUM   | UNITS              | MINIMUM   | AVERAGE  | MAXIMUM      | UNITS  | ]         | ANALYSIS        | ŀ      |                |
| TRICHLOROETHYLENE                     | SAMPLE<br>MEASUREMENT | <0:0000073  | <0.0000085  | kg/day             | *****   | <0.09  | <0.09        | ug/L   | 0         | 2/month         |        | grab           |
|                                       | PERMIT<br>REQUIREMENT | 0.004   | 0.010   | Andreas de Calabra | *********   | 28   | . 89         |  |           | 2/month         |        | grab (         |
| VINYL CHLORIDE                        | SAMPLE<br>MEASUREMENT | <0:0000125  | <0.0000143  | kg/day             | ****  | <0:14  | <0.14        | ug/L   | 0         | 1/week          |        | grab           |
|                                       | PERMIT REQUIREMENT    | 0.008   | 0.016   |                    |   | 52.8   | 108          | To the state of th |           | Weekly          | 排 海    | grab           |
| ACENAPHTHYLENE                        | SAMPLE<br>MEASUREMENT | <0.0000028  | <0.0000033  | kg/day             | ******  | <0.035   | <0.035       | ug/L   | 0         | 1/month         |        | grab           |
|                                       | PERMIT REQUIREMENT    | 0.00026   | 0.00052   |                    |   | 172  | 8.43         | CONTRACTOR OF THE CONTRACTOR O |           | morithly        |        | grab           |
| BENZO(A)ANTHRACENE                    | SAMPLE<br>MEASUREMENT | <0.0000037  | <0,0000042  | kg/day             | ******  | <0.05  | <0.05        | ug/L   | 0         | 1/month         |        | grab           |
|                                       | PERMIT REQUIREMENT    | 0.00028   | 0.00052   |                    | TO THE RESERVE TO THE PARTY OF |  | 3.43         | 400-   |           | monthly,        |        | grab.          |
| BENZO(A)PYRENE                        | SAMPLE<br>MEASUREMENT | <0.0000049  | <0.0000056  | kg/day             | ******  | <0.080   | <0.080       | ug/L   | 0         | 1/month         |        | grab           |
|                                       | PERMIT REQUIREMENT    | 0.00026   | 0.00052   |                    |   | 172  | 3.43         | State of the state |           | monthly         |        | grab           |
| BENZO(ghi)PERYLENE                    | SAMPLE<br>MEASUREMENT | <0.0000081  | <0.0000094  | kg/day             | *****   | <0:100   | <0.100       | ug/L   | 0         | 1/month         |        | grab           |
| ·                                     | PERMIT<br>REQUIREMENT | 0.00026   | 0.00052   | ·                  |   | 172  | 3.43         | State September 1997   |           | monthly         |        | grab           |
| BENZO(k)FLUORANTHENE                  | SAMPLE<br>MEASUREMENT | <0.0000035  | <0.0000041  | kg/day             | *****   | <0.044   | <0.044       | ug/L   | 0         | 1/month         |        | grab           |
|                                       | PERMIT<br>REQUIREMENT | 0.00028   | 0.00052   |                    | 14 April 1  | 1. A. 1.72                                     | <b>3.4</b> 3 |  |           | monthly         |        | grab           |
| NAME/TITLE PRINCIPAL EXECUTIVE        | /E OFFICER            | I certify under penalty of law that I have  | personally examined and I am familiar   | with the informati | ion"  |  | 11/1         |  | TELEPH    | ONE             |        | DATE           |
| Glenn Grieb<br>Project Manag          | er                    | summed herein, and based on my inquitte information, I believe the submitted there are significant penalties for submit | uiry of those individuals immediately resi<br>information is true, accurate, and comp<br>liting felse information, including the por<br>its U.S.C. 1318 | -                  | that  | Xlenn  | Dut          |  | 572-474   | 3               | 14     | 04 21          |
| TYPED OR PRINTED                      |                       |   | ю U.S.C. 1319.<br>cimum imprisonment of between 6 mon   |                    | er these statutes may   | SIGNATURE OF PRINCIPAL<br>OFFICER OR AUTHORIZE | 7            | AREA   | NUM       | RER             | YEAR   | Mo             |
| COMMENTS AND EXPLANATIONS OF ANY VIOL | TIONS                 | (REFERENCE ALL ATTACH   |   |                    |   | TOFFICER OR AUTHORIZE                          | D VOEIAI     | LOOPE  | I HOM     | <u> </u>        | ···EAR |                |

<0.00017

NAME ADDRESS SCA SERVICES, INC. 383 MEADOW ROAD

383 MEADOW ROAD EDISON, NEW JERSEY 08817

FACILITY LOCATION ATTN: KIN-BUC LANDFILL EDISON, NEW JERSEY CARL JANUSZKIEWICZ

# NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM DISCHARGE MONITORING REPORT

NJ PERMIT EQUIVALENT DISCHARGE NUMBER DISCHARGE NUMBER

| MONITORING PERIOD | YEAR | MO | DAY | | 14 | 03 | 01 | TO | 14 | 03 | 31 |

| PARAMETER   |                       |   | QUANTITY OR L  | OADING                              |  | QUALITY OR CONCE     | NTRATION            |              | NO.<br>EX                               | FREQUENCY<br>OF | _     | IPLE<br>YPE   |
|---|-----------------------|---|--|-------------------------------------|--|----------------------|---------------------|--------------|---|-----------------|-------|---------------|
|   |                       | AVERAGE   | MAXIMUM  | UNITS                               | MINIMUM  | AVERAGE              | MAXIMUM             | UNITS        |   | ANALYSIS        |       |               |
| IDENO(1,2,3cd) PYRENE                                       | SAMPLE<br>MEASUREMENT | <0.0000155  | <0.0000179   | kg/day                              | ****   | <0.190               | <0.190              | ug/L         | 0                                       | 1/month         | grai  | ,<br>,        |
|   | PERMIT REQUIREMENT    | 0.00026   | 0.00052  |                                     |  | 1172                 | 343                 |              |   | monthly         | gral  |               |
| PHENANTHRENE  | SAMPLE<br>MEASUREMENT | <0.0000562  | <0.0001124   | kg/day                              | *****  | <0.587               | <1.1                | ug/L         | 0                                       | 1/week          | grai  | )             |
|   | PERMIT REQUIREMENT    | REPORT  | ONLY   |                                     | *******  | REPORT ONLY          | 5.4(2)              | é            | 1 P P P P P P P P P P P P P P P P P P P | weekly          | grai  | 4 7 . 6 .     |
| ALDRIN  | SAMPLE<br>MEASUREMENT | <0.0000013  | <0.0000016   | kg/day                              | ******   | <0:017               | <0.017              | ug/L         | 0                                       | 1/month         | gral  | )             |
|   | PERMIT<br>REQUIREMENT | 0.000133  | 0.00028  |                                     |  | 0.0875               | 0.176               | 44.7         |   | monthly         | grai  |               |
| 4,4-DDT   | SAMPLE<br>MEASUREMENT | <0.0000023  | <0.0000026   | kg/day                              | *****  | <0.026               | <0.027              | ug/L         | 0                                       | 1/week          | gral  | •             |
|   | PERMIT<br>REQUIREMENT | 6.0000578   | 0.000146   | or to transfer                      |  | 0138 1 14 1          | ** 0.766            |              |   | weekly          |       |               |
| PCB-1242  | SAMPLE<br>MEASUREMENT | <0.0000046  | <0.0000073   | kg/day                              | *****  | <0.05                | <0:08               | ug/L         | 0                                       | 1/week          | grat  |               |
| •   | PERMIT REQUIREMENT    | REPORT  | ONLY   |                                     | *******  | REPORT ONLY          | 0.5(2)              |              | :                                       | weekly          |       | St. Carlotter |
| PCB-1248  | SAMPLE<br>MEASUREMENT | <0.0000046  | <0.0000073   | kg/day                              | *****  | <0.05                | <0.08               | ug/L         | 0                                       | 1/week          | grat  | ,<br>)        |
|   | PERMIT<br>REQUIREMENT | REPORT  | ONLY   |                                     | 表 ( ********                                     | REPORT ONLY          | 0.5(2)              |              |   | weekly          | gra   |               |
| PCB-1254  | SAMPLE<br>MEASUREMENT | <0.0000048  | <0.0000072   | kg/day                              | *****  | <0:06                | <0:08               | ug/L         | . 0                                     | 1/week          | gral  |               |
| · .   | PERMIT<br>REQUIREMENT | REPORT  | ONLY   |                                     | *******  | REFORT ONLY          | 0.5(2)              |              |   | weekly          | ge    |               |
| NAME/TITLE PRINCIPAL EXECUTIVE OF                           | FICER                 | I certify under penalty of law that<br>submitted herein, and based on                           | I have personally examined an  |                                     |  | 1/1/                 | 11                  |              | TELEPHO                                 | ĮE.             | DATE  |               |
| Glenn Grieb<br>Project Manager                              |                       | the information, I believe the sub<br>there are significant penalties for                       | mitted information is true, accu<br>submitting false information, is | urate, and comp<br>including the po | plete. I am aware that<br>essibility of fine and | Den                  | Jub                 |              | 572-474                                 | 3               | 14 04 | 21            |
| TYPED OR PRINTED COMMENTS AND EXPLANATIONS OF ANY VIOLATION |                       | Imprisonment. See 18 U.S.C. 10<br>Include fines up to \$10,000 and of<br>(REFERENCE ALL ATTACK) | or meximum imprisonment of be  | •                                   | der these statutes may<br>hs and 5 years)        | OFFICER OR AUTHORIZE | EXECUTIVE<br>DAGENT | AREA<br>CODE | NUM                                     | BER             | YEAR  | MO            |

NAME ADDRESS SCA SERVICES, INC. 383 MEADOW ROAD

**EDISON, NEW JERSEY 08817** 

FACILITY LOCATION ATTN: KIN-BUC LANDFILL EDISON, NEW JERSEY CARL JANUSZKIEWICZ

## NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM DISCHARGE MONITORING REPORT

NJ PERMIT EQUIVALENT
PERMIT NUMBER

MONITORING PERIOD

YEAR MO DAY

YEAR MO DAY

YEAR MO DAY

YEAR MO DAY

03 31

14

| PARAMETER  |                        | Q  | WANTITY OR LOADING                  |                               |   | QUALITY OR CONCENTRA                           | TION    |                    | NO.<br>EX | FREQUENCY<br>OF | SAMP      |                 |
|--|------------------------|--|-------------------------------------|-------------------------------|---|--|---------|--------------------|-----------|-----------------|-----------|-----------------|
|  | :                      | AVERAGE  | MAXIMUM                             | UNITS                         | MINIMUM                                   | AVERAGE  | MAXIMUM | UNITS              |           | ANALYSIS        | L         |                 |
| PCB-1260   | SAMPLE<br>MEASUREMENT  | <0.0000048   | <0.0000072                          | kg/day                        | *****                                     | <0.06  | <0.08   | ug/L               | 0         | 1/week          | grab      |                 |
|  | PERMIT<br>REQUIREMENT  | REPORT   | ONLY                                |                               | - inches                                  | REPORT ONLY                                    | 0.5(2)  |                    |           | weekly          | grab      | A Line Services |
| ARSENIC  | SAMPLE<br>MEASUREMENT  | 0.0005830  | 0.0007050                           | kg/day                        | *******                                   | 6,60   | 7.50    | ug/L               | 0         | 1/week          | comp      | ,               |
|  | PERMIT<br>REQUIREMENT  | 0.013  | 0.028                               |                               |   | 858  | 172     | Called the Control |           | weekly          | comp      |                 |
| CADMIUM  | SAMPLE<br>MEASUREMENT  | <0.0001959   | <0.0002248                          | kg/day                        | ******                                    | 2.2  | 2.2     | ug/L               | 0         | 1/week          | . comp    | ,               |
|  | REQUIREMENT            | 0.0073   | <b>0</b> 017                        |                               | -   | 482  | 112     |                    |           | weekly          | comp      |                 |
| CHROMIUM   | SAMPLE<br>MEASUREMENT  | 0.0004007  | 0.0004598                           | .kg/day                       | ****                                      | 4:50   | 4.50    | ug/L               | 0         | 1/week          | comp      |                 |
| est to the second  | PERMIT<br>REQUIREMENT  | 0.030  | 0.080                               |                               | minut.                                    | 198  | 386     |                    |           | weekly          | comp      |                 |
| COPPER   | SAMPLE<br>MEASUREMENT  | 0.0003312  | 0.0004093                           | kg/day                        | ******                                    | 3.9  | 5.5     | ug/L               | 0         | 1/week          | comp      |                 |
|  | PERMIT REQUIREMENT     | REPORT   | ONLY                                |                               | · · · · · · · · · · · · · · · · · · ·     | REPORT ONLY                                    | 10      |                    |           | weekly          | comp      |                 |
| LEAD   | SAMPLE<br>MEASUREMENT  | 0.0001247  | 0.0001430                           | kg/day                        | *******                                   | 1:40   | 1:40    | ug/L               | 0         | 1/week          | comp      |                 |
|  | PERMIT.<br>REQUIREMENT | REPORT   | ONLY                                |                               |   | REPORT ONLY                                    | 0       |                    | ,         | weekly          | comp      |                 |
| NICKEL   | SAMPLE<br>MEASUREMENT  | 0.0036528  | 0.0048224                           | kg/day                        | ******                                    | 41.0   | 47:2    | ug/L               | 0         | 1/week          | comp      |                 |
|  | PERMIT.<br>REQUIREMENT | 0:140  | 0.281                               |                               | *******                                   | 924  | 1850    |                    |           | Weekily         | comp      | . 72            |
| NAME/TITLE PRINCIPAL EXECUTIVE OF                            | FICER                  |  | I have personally examined and I    |                               |   | 11.  | // .    |                    | TELEPHO   | NE              | DATE      |                 |
| Glenn Grieb<br>Project Manager                               |                        | the information, I believe the sub-<br>there are significant penalties for                     | submitting false information, inclu | e, and completeding the possi | te. I am aware that<br>bility of fine and | Glen   | Gul     |                    | 572-474   | 3               | 14 04     | 21              |
| TYPED OR PRINTED  COMMENTS AND EXPLANATIONS OF ANY VIOLATION |                        | Imprisonment. See 18 U.S.C. 10<br>include fines up to \$10,000 and of<br>(REFERENCE ALL ATTACH | or maximum imprisonment of betw     |                               | nder these statutes may<br>and 5 years)   | SIGNATURE OF PRINCIPAL<br>OFFICER OR AUTHORIZE |         | AREA<br>CODE       | NUM       | BER             | YEAR MO D | DAY             |

14 03 01

NAME ADDRESS SCA SERVICES, INC. 383 MEADOW ROAD

**EDISON, NEW JERSEY 08817** 

FACILITY LOCATION ATTN: KIN-BUC LANDFILL EDISON, NEW JERSEY CARL JANUSZKIEWICZ

# NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM DISCHARGE MONITORING REPORT

NJ PERMIT EQUIVALENT
PERMIT NUMBER

MONITORING PERIOD

MONITORING PERIOD

 MONITORING PERIOD

 YEAR
 MO
 DAY
 YEAR
 MO
 DAY

 14
 03
 01
 TO
 14
 03
 31

| <del></del>                                |                         |   |  |                 |   |                         |                             |             |          |                |                 |
|--|-------------------------|---|--|-----------------|---|-------------------------|-----------------------------|-------------|----------|----------------|-----------------|
|  |                         | Q   | UANTITY OR LOADING   |                 |   | QUALITY OR CONCENTRA    | TION                        |             | NO.      | FREQUENCY      | SAMPLE          |
| PARAMETER                                  |                         |   | ·  |                 |   |                         |                             |             | EX       | OF:            | TYPE            |
|  |                         | AVERAGE   | MAXIMUM  | UNITS           | MINIMUM   | AVERAGE                 | MAXIMUM                     | UNITS       |          | ANALYSIS       |                 |
| ZINC                                       | SAMPLE                  |   |  |                 |   |                         |                             | !           |          |                |                 |
| _  | MEASUREMENT             | 0.0016207   | 0.0018595  | kg/day          | *******   | 18.2                    | 18.2                        | ug/L        | 0        | 1/week         | comp            |
|  | PERMIT.<br>REQUIREMENT  | 0.177   | 0.856  |                 | innasta.  | 1170                    | 2350                        |             |          | weekdy         | comp            |
| CYANIDE                                    | SAMPLE                  | F35,24, 83 3576, £1798 / (243 25582), 98                              | 8537 ANNIE - BETTER PROJECT - 1971 - 1974 - 1984 - 1983 - 1983   |                 | 83 - 197 <u>00- 7 30 - 7136 03 500 - 6 6</u> 21 | # 1514 Tile ( 2)        |                             | 1           |          | 中子一个是多 数设备 进口地 | e e e ka beares |
| <del></del>                                | MEASUREMENT             | <0.0006364  | <0.0013282   | kg/day          | *******   | 6.9                     | 13.0                        | ug/L        | . 0      | 1/week         | сотр            |
|  | PERMIT:<br>REQUIREMENT  | 0.002   | 0.004  |                 | estinación                                      | 13.2                    | 26.4                        |             |          | weekly         | comp            |
| ALUMINUM                                   | SAMPLE<br>MEASUREMENT   | 0.0202900   | 0.0468955  |                 | *******   | 213.4                   | 459.0                       |             |          |                |                 |
|  | 1007731-78-47.00        | 0.0202900   | 0.0400803  | kg/day          |   | 213.4                   | 435.U:                      | ug/L        | 0        | 1/week         | comp .          |
|  | PERMIT<br>REQUIREMENT   | 120   | 281  |                 | ***************************************         | 9240                    | 18500                       | . '         |          | weekly         | comp            |
| IRON                                       | SAMPLE                  |   |  |                 | 1.13 黑书是引                                       |                         |                             |             |          |                |                 |
|  | MEASUREMENT             | 0.0178876   | 0.0323875  | kg/day          |   | 195:5                   | 317.0                       | ug/L        | 0        | 1/week         | comp            |
|  | PERMIT L<br>REQUIREMENT | 80,8  | 162  |                 |   | 532000                  | 1070000                     | 1           |          | weekty         | CAMID           |
|  | at a server also        |   |  |                 | remark is a distance                            | and the second and the  | THE CONTRACTOR              | 2           |          | Weekly         |                 |
| ACUTE TOXICITY, (LC50)                     | SAMPLE<br>MEASUREMENT   | QUARTELY  | REPORT   |                 | >100%   | ********                | *******                     | %           | 0        |                |                 |
|  | PERMIT                  |   |  |                 | · · · · · · · · · · · · · · · · · · ·           |                         |                             |             | •        |                |                 |
|  | REGULTEREN              | escence   | <b>高度基本基本表面</b> 表示   |                 | 50(3)   |                         |                             |             | ļ        | see permit     | equivalent      |
| Ammonia                                    | SAMPLE<br>MEASUREMENT   | ******  | *******  |                 | ******  | 0.265                   | 0.270                       | mg/f        | 0        | ******         | ******          |
|  | PERMIT<br>REQUIREMENT   | ******  | *******  |                 |   | 4                       | 10.0                        |             |          | 2/month        | comp            |
|  | SAMPLE<br>MEASUREMENT   | ******  | ******   | ***             | ******  | ******                  | ******                      | ***         | ***      | ******         | *******         |
|  | PERMIT<br>REQUIREMENT   | esatement .   |  |                 | 111111111111111111111111111111111111111         |                         |                             |             | :        |                |                 |
| NAME/TITLE PRINCIPAL EXECUTIVE OF          |                         | certify under penalty of law that i                                   | have personally examined and a   | m femiliar with | the information                                 |                         | A Company of the Section of |             | TELEPHO  |                | DATE            |
|  |                         |   | y inquiry of those individuals imme  |                 | •   | l Ma                    | $\Psi$ 1                    |             |          |                |                 |
| Glenn Grieb<br>Project Manager             |                         | the information, I believe the subr                                   | the second secon |                 |   | 1 (NV)                  | ALL LT                      | 720         | LE70 474 | •              | aa iba i na     |
| rojectivianager                            |                         | there are significant penalties for<br>imprisonment. See 18 U.S.C. 10 |  |                 | blity of fine and<br>der these statutes may     | SIGNATURE OF PRINCIPAL  | EVECUTIVE                   | 732<br>AREA | 572-474  | 3              | 14 04 21        |
| TYPED OR PRINTED                           |                         |   | r maximum imprisonment of betwe  |                 | · .   | OFFICER OR AUTHORIZE    |                             | CODE        | NÚM      | RER            | YEAR MO DAY     |
| COMMENTS AND EXPLANATIONS OF ANY VIOLATION | Ś                       | (REFERENCE ALL ATTACH   |  |                 |   | JOI LIGHT ON AUTHORIZED | AGENT                       | JOODE       | 140191   |                | The I may be    |
|  | _                       |   |  |                 |   |                         |                             |             |          |                |                 |

PAGE\_6\_OF\_6\_





### NJPDES BIOMONITORING REPORT FORM-ACUTE TOXICITY EPA METHOD 2007.0



Permit Number #: Permit Equivalent

DSN: 001

Facility name:

Kin-Buc Landfill

Facility address:

383 Meadow Road

Edison, NJ

Facility contact person:

Glen Grieb

Phone number:

732.561.7600

Acute toxicity laboratory:

QC Laboratories Aquatic Toxicology Division

1205 Industrial Blvd Southampton, PA 18966

/NELAC certification number:

PA166

**Test Specifications:** 

Effluent Type: Final

Test Type: Modified static renewal (24-hour)

Test Results:

Test Start: 03/25/14 13:50

Test End: 03/29/14 13:30

Test endpoint: LC50

Highest percent mortality in top test concentration: 0.0%

REPORT THIS VALUE......>100%

95% Confidence Interval: NA

Test organism:

Mysid Shrimp common name

Mysidopsis bahia scientific name

**Quality Control Summary** 

Control Mortality (%): 0.0%

Temperature maintained within 20 +/- 1 °C? Yes

Dissolved Oxygen Levels always greater than 40% saturation? Ye

Two or more concentrations exhibit a trend deviation? No

Certification:

Accuracy of report certified by:

Robert A Martino
Laboratory Director

Date

### Test Organism Data:

Test organism source: Marinco

#### **Test Organism Acclimation:**

Is the culture water and test dilution water the same, and are the culture water temperature and dilution water temperature identical? No

### Mysid, Daphnids and Cladocerans:

Initial number of organisms: 150

Test organism age at start of test (days): 4 days

Culture water source: 40 Fathoms Culture water salinity: 25 ppt Culture water temperature: 25°C Dilution water source: In-house

Dilution water salini uppon col ction: NA

Dilution water temperature upon collection: NA

Number of mortalities: < 5%

#### Test Design:

Number of effluent test concentrations: 5
Number of replicates/test concentration: 4
Number of test organisms/replicate: 5
Volume of liquid in test chambers (liters): 0.20
Flow-through bioassay exchange rate (cycles/day): NA

### Effluent sampling:

Plant sampling location: Final effluent just before weir.

Effluent type: Final.
Discharge: Continuous

Effluent sample type: 24 hour composite

| Effi     | uent San | nple Collecti | on    |                        | Initi:<br>In | Use in Te | Toxicity<br>sts | Holding<br>Time |          |         |             |
|----------|----------|---------------|-------|------------------------|--------------|-----------|-----------------|-----------------|----------|---------|-------------|
| Begin    | ning     | End           | ing   | temp d.o Cond Chlorine |              |           |                 |                 |          |         | (first use) |
| date     | time     | date          | time  | °c '                   | pHi / pHs    | mg/L      | umhos           | ppm             | date(s)  | time(s) | hours       |
| 03/23/14 | 8:00     | 03/24/14      | 8:00  | 5.0                    | 8.18         | 10.5      | 9780            | < 0.1           | 03/25/14 | 13:50   | 29:50       |
| 03/24/14 | 11:00    | 03/25/14      | 11:00 | 5.0                    | 8.29         | 11.4      | 10030           | < 0.1           | 03/26/14 | 13:45   | 26:45       |
| 03/25/14 | 11:00    | 03/26/14      | 11:00 | 5.0                    | 8.29         | 10.7      | 10130           | < 0.1           | 03/27/14 | 13:50   | 27:55       |
| 03/26/14 | 13:30    | 03/27/14      | 13:30 | 5.0                    | 8.34         | 9.6       | 10200           | <0.1            | 03/28/14 | 13:50   | 24:20       |
|          |          |               |       |                        |              |           |                 |                 |          |         |             |

Testing location: QC Laboratories

#### **Effluent Sample Adjustments**

Were any salinity adjustments made? Yes

If yes, specify the source of sea salts, brine or water used: Dry 40 Fathoms (biotechnical grade)

Were any pH adjustments made? No.

-pH / Chlorine Adjustment-----

|             | Volume   | pH prior   | Salinity | pH after | ml's 0.2N | pH after   | TRC    | Amt. STS    | TRC after |
|-------------|----------|------------|----------|----------|-----------|------------|--------|-------------|-----------|
| Sample Used | Adjusted | to Salting | ppt      | Salting  | HCI Used  | Adjustment | sample | added (mgs) | Addition  |
|             |          |            |          |          |           |            |        |             |           |
|             |          |            |          |          |           |            |        |             |           |
|             |          |            |          |          |           |            |        |             |           |
|             |          |            |          |          |           |            |        |             |           |

Was the effluent sample filtered in any manner? No If yes, please specify the mesh size:

Were any adjustments to the level of chlorine made? No.

If yes, specify the dechlorination agent used and the amount of reagent used: NA

Specify the chlorine levels prior to and after addition of the reagent: See data above.

Was an additional control included in the test containing the dechlorination agent? Yes, added to Control B.

#### **Dilution Water:**

Effluent receiving water: Raritan River.

Dilution water source: 40 fathoms

If a substitute dilution water was used, had its use been approved by the NJDEP in the

acute methodology questionnaire?

Collection location: In-house

Collection date(s): NA

0 hour 24 hour 48 hour 72 hour 96 hour

LC50/EC50 (% effluent)

>100% >100% >100% >100% >100%

Calculation method: No measurable acute toxicity.

Is the calculated LC50/EC50 valid according to the specifications of the method used? Yes

#### Miscellaneous:

Were any exposure chambers aerated during the test? No

If yes, specify concentrations and duration, including the lowest percent saturation reached prior to aeration and at what time:

Were the test organisms observed for appearance and behavior at least daily? Yes

### Physical/Chemical Data

| <u>. N</u>         | MHFW Dil           | ution Wate       | er_             |                    | 100%               | Effluent         |                 |
|--------------------|--------------------|------------------|-----------------|--------------------|--------------------|------------------|-----------------|
| Sample<br>Sequence | Alkalinity<br>mg/L | Hardness<br>mg/L | Ammonia*<br>ppm | Sample<br>Sequence | Alkalinity<br>mg/L | Hardness<br>mg/L | Ammonia¹<br>ppm |
| D001               | 130                | NA               | NA              | E001               | 356                | NA               | < 0.1           |
|                    |                    |                  |                 | E002               | 406                | ŇA               | 0.91            |
|                    |                    |                  |                 | E003               | 433                | NA               | 0.48            |
|                    |                    |                  |                 | E004               | 447                | NA               | < 0.1           |

<sup>\*</sup>Ammonia analysis performed by QC Laboratories Analytical Laboratory, Certification PA166, by method SM 20th ed. 4500-NH3D

### Comments

**Additional Comments:** 

<sup>\*\*</sup>Please note that the ammonia analysis is performed on composite samples unless otherwise noted.

### Bioassay Deliverables Check List

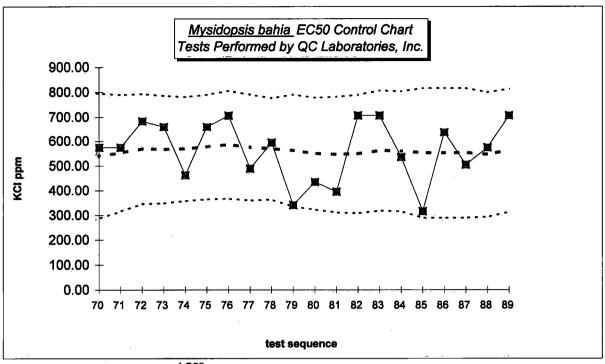
|       | Bioassay Deliverables Check List  | Yes | No                     | ŅA | Reviewer    |
|-------|---|-----|------------------------|----|-------------|
| 1.0   | Dates of testing match raw data   | ď   |                        | 0  | CBE         |
| 2.0   | Facility Name, NPDES Number, DSN Number Complete                            | ₫   |                        |    |             |
| 3.0   | Control mortality less than 10% for acutes or less than 20% for chronics    | Ø   |                        | •  |             |
| 4.0   | Temperature maintained within 1°C for acute and chronic studies             |     |                        |    |             |
| 5.0   | Dissolved oxygen levels always greater than 40% saturation                  |     |                        |    |             |
| 6,0   | Test design complete  | ď   | _                      |    |             |
| 7.0   | Effluent sampling section complete and holding times are less than 36 hours | Ø   |                        |    |             |
| 8.0   | Temperature at time of sampling recorded on chain of custody                |     |                        |    |             |
| 9.0   | Dilution water sampling section complete                                    |     | □                      |    |             |
| 10.0  | Chain of custody present  | Ø   | <b>-</b>               |    | $\frac{}{}$ |
| 11.0  | Test results complete and match statistics pages (if applicable)            |     |                        |    |             |
| 12.0  | For chronics are PMSD values within acceptable ranges for given species*    |     | •                      |    |             |
| 13.0  | Two or more concentrations exhibit a trend deviation                        |     |                        | ä  |             |
| 14.0  | SRT Data attached and current   |     | Ĩ.                     |    |             |
| 15.0  | Approval for variance   | •   |                        | ď  |             |
| 16.0  | Lims Number at bottom center of page matches report number                  |     | Ċ                      |    |             |
| 17.0  | Serial Number correct   |     |                        |    |             |
| 18.00 | Applicable Method Number clearly indicated on front page of report          | 6   | <b>\(\int_{\chi}\)</b> |    | <i>I</i>    |

\* Acceptable PMSD Values

| Test Method        | Endpoint     | 10th PMSD | 90th PMSD |
|--------------------|--------------|-----------|-----------|
| Ceriodaphnia dubia | Reproduction | 13        | 47        |
| Fathead Minnow     | Growth       | 12        | 30        |
| Inland Silverside  | Growth       | 11        | 28        |
| Mysid Shrimp       | Growth       | 11        | 37        |
| Sheepshead Minnow  | Growth       | 6         | 23        |

QA Review: MUNIUL GALLO Date: 04/11/14
Printed Name: Michelle Jadico





|           |             | LC50   |        |         |         |      |        |
|-----------|-------------|--------|--------|---------|---------|------|--------|
| Date      | test number | ppm    | MEAN   | UCL 2SD | LCL 2SD | STDV | STDVX2 |
| 11/6/2012 | 70          | 574.35 | 541.49 | 795.86  | 287.13  |      |        |
| 12/4/2012 | <b>7</b> 1  | 574.35 | 553.01 | 790.00  | 316.01  |      |        |
| 1/8/2013  | 72          | 683.02 | 569.48 | 793.55  | 345.41  |      |        |
| 2/7/2013  | 73          | 659.75 | 567.11 | 786.00  | 348.22  |      |        |
| 3/5/2013  | 74          | 462.71 | 569.84 | 781.63  | 358.05  |      |        |
| 4/9/2013  | 75          | 659.75 | 577.44 | 790.75  | 364.14  |      |        |
| 5/7/2013  | 76          | 707.11 | 586.52 | 805.89  | 367.15  |      |        |
| 6/4/2013  | 77          | 489.11 | 575.62 | 791.40  | 359.84  |      |        |
| 7/9/2013  | 78          | 594.60 | 569.99 | 777.03  | 362.96  |      |        |
| 8/6/2013  | 79          | 341.51 | 562.92 | 791.06  | 334.78  |      |        |
| 8/28/2013 | 80          | 435.28 | 550.53 | 778.12  | 322.95  |      |        |
| 8/28/2013 | 81          | 395.26 | 546.97 | 782.20  | 311.74  |      |        |
| 9/4/2013  | 82          | 707.11 | 549.34 | 790.24  | 308.44  |      |        |
| 9/4/2013  | 83          | 707.11 | 562.96 | 807.34  | 318.58  |      |        |
| 10/2/2013 | 84          | 535.89 | 560.03 | 804.22  | 315.83  |      |        |
| 11/5/2013 | 85          | 316.25 | 553.31 | 816.80  | 289.81  |      |        |
| 12/3/2013 | 86          | 637.28 | 553.31 | 816.80  | 289.81  |      |        |
| 1/14/2014 | 87          | 504.60 | 553.52 | 816.84  | 290.20  |      |        |
| 2/11/2014 | 88          | 574.35 | 546.88 | 800.42  | 293.35  |      |        |
| 3/4/2014  | 89          | 707.11 | 563.32 | 813.44  | 313,21  |      |        |
| •         | CV          | 22.2%  |        |         |         |      |        |





### EPA TEST METHOD 2007.0-ACUTE TESTING WITH AMERICAMYSIS BAHIA

| Study Number:                 | 4985446                     |                         | client: Km-Buc  |
|-------------------------------|-----------------------------|-------------------------|---|
| •                             | 1-R-02-012 NT               |                         | Water Bath/Incubator: 20                                  |
| Date Initiated:               | 3-25-14                     | ,                       | Time Initiated: /350                                      |
| Date Terminated:              | 3-29.14                     |                         | Time Terminated: 1330                                     |
| Test Duration:                | 24-hour 48-hour 72-h        | our 96-hour Other:      |   |
| Test Type:                    | 6-hour static renewal       | 24-hour static ren      | ewal static-no renewal                                    |
|                               | flow-through/dilutor used:  |                         | other:  |
| Test Material:                | Effluent Rece               | oiving Water            | Non Contact/Contact Cooling Water                         |
|                               | Pure Compound:              |                         | SRT Solution / Lot #:                                     |
|                               | Other:                      |                         |   |
| Dilution Water:               | Receiving Waters:           |                         | Synthetic / Lot #: Salt / SWL 4020714  - 80 100 - 7 - 100 |
| Test Concentrations           | control <u>Zo</u>           | 40 60                   | 80 100  |
|                               | <i>~</i> ≒                  | 3 4                     | 5 6 7 8 units   |
| Salt Added to Effluer         | nl(Y) N Test S              | Salinity: 25 ppt        | Brand of Artificial Salts Used: 40-Fethoms Other:         |
| Test Volume(mi's):            | 100 200 250                 | 500 1000                | other:  |
| Number of Replicate           | s: 2 4 5 other:             | Number                  | of Organisms / Replicate: (5) 10 other:                   |
| Test Temperature (°C          | c): (20) 22                 | 25 other:               | ,   |
| Test Species:                 | Mysid Shrimp                | Mysidopsis bahla        |   |
| Source: In house              | 1.4.                        | Commercial Supplie      | F) MBL  |
| Lot Numbe                     | er: MYNBLO32114             |                         |   |
| Original Number of Or         | ganisms Acclimated:         | Age at test initiation: | @ vecupt  |
| Acclimation Initiated:  Date: | Time:                       | 77 ° C:                 | pHi D.O.i Sal.i   |
| Acclimation Terminate         | d:                          |                         | ,   |
| Date:                         | Time:                       | Tf °C:                  | pHf D.O.f Sal.f   |
| Time Organisms remai          | ned in 100% Dilution Water: |                         | % Dead:   |
| Time Organisms Added          | d to Test Chambers:         |                         |   |
| Comments                      |                             |                         |   |
| _                             |                             |                         |   |
| =                             |                             | / /                     |   |
| <del>-</del> -                |                             |                         | 1   |
|                               |                             | Y                       | 4/7 Gon   |
| V                             | ERIFICATION OF LABORATO     | DE DIDECTOR             |   |



# MORTALITY/BEHAVIORAL OBSERVATIONS INVERTEBRATE TESTS

4985446 Study Number: **OBSERVATION TIME FROM T=0** CONC 24 hours 72\_hours 0 hours 48 hours 96 hours REP alive obs obs alive alive alive obs 1A Control 1B 1C 1D 2A 2B 20 2C 2D **3A** 3B 40 3C 3D 4A 4B <del>(00</del> 4C 4D 5A 5B 80 5C 5D 6A 6B 100 6C 6D 7A 7B 7C 7D 8A 8B 8C 8D Signature 1111 w W 3-25-14 Date 57671Y 317.14 328-14 3 Renewal Time 1350 1250 Sample Used Observations: D Dead: no appendage movement C Cannibalized F Fed I Immobile **REMARKS** 



# Physical/Chemical Parameters Sheet

Study Number:

4985446

| T=0/24 F           | irs     | temp  | do       | рΗ    | Sal   | don /    | . ~ |
|--------------------|---------|-------|----------|-------|-------|----------|-----|
| ·/.                |         | ℃     | mg/i     | units | ppt   | umhos (A | úω  |
| control            | initia  | 19.0  | 9.0      | 8.2   | 1240  |          |     |
|                    | fina    | 190   | 8.1      | 8.04  | 24.9  |          |     |
| 20                 | initial | 19.4  | 9.0      | 8.30  | 248   |          |     |
| 20                 | final   | 191   | 8.0      | 8.11  | 254   |          |     |
| 40                 | initial | 19.8  | 9.0      | 8.30  | 25.1  |          |     |
| 10                 | final   | Pro   | 18.7     | 8.26  | 25%   |          |     |
| 60                 | initial | 19.9  | 8.9      | 8.29  | 25.3  |          |     |
| 00                 | final   | 19.0  | 8.2      | 8.26  | 76-2  |          |     |
| 80                 | initial | 20.4  | 8.9      | 8.29  | 25.5  |          |     |
| 00                 | final   | 19.0  | 8.1      | 827   | 710.2 |          |     |
| 100                | initial | 21.0  | 8.8      | 8.28  | 25.7  |          |     |
| 100                | final   | 190   | 8-0      | 8:31  | 267   |          |     |
|                    | Initial |       |          |       |       |          |     |
|                    | final   |       |          |       |       |          |     |
| nitials A          | 2 1     | NV f  | comments |       |       |          |     |
| Pate 32            | 5-14    | 32014 |          |       |       | l        |     |
| ime 3              | 3501    | 1345  |          |       |       |          |     |
| herm. ID <i>CF</i> | 149     | PISDE |          |       |       |          |     |

| T=24/     | 48 Hrs  | temp  | do       | На    | Sal  | con   |      |
|-----------|---------|-------|----------|-------|------|-------|------|
| <u>/.</u> |         | ဇင    | mg/i     | units | ppt  | umhos | (X10 |
| control   | Initia  | 19.8  | 8.4      | 830   | 24,0 |       | 7    |
|           | fina    | 1 9:0 | 8-2      | 8:01  | 25'0 |       | 7    |
| 20        | initla  | 200   | 8-6      | 8.30  | 243  |       | 7    |
| 20        | fina    | 19.0  | 9.2      | 8.18  | 25.8 |       | 7    |
| 40        | initial | 203   | 8.5      | 8.30  | 24.8 |       | 1    |
|           | final   | 19:0  | 8-1      | 8-78  | 265  |       | 1    |
| 60        | initial | 20.6  | 84       | 8.29  | 25,3 |       | 1    |
| -         | final   | 19.0  | 8-0      | 836   | 266  |       | 1    |
| 80        | initiai | 208   | 8.4      | 829   | 25.8 |       | 1    |
|           | final   | 19.0  | 80       | 8.35  | 26.6 |       | 1    |
| 100       | initial | 410   | 8.4      | 8-29  | 26:3 |       | 1    |
| 100       | final   | 19.0  | 8.1      | 8:35  | 26.9 |       | 1    |
|           | initial |       |          |       | 5 L  |       |      |
|           | final   |       |          |       |      |       |      |
| ltials    | wi!     | WI    | comments |       | ···  |       |      |
| ate       | 326.14  | 32714 |          |       | •    |       |      |
| шe        | 1355    | BSO 1 |          |       |      | -     |      |
| nerm. ID  | CASOIL  | PMA   |          |       |      | l     |      |

| T=48        | /72 Hrs | temp             | do       | ģΗ    | Sal          | con   | 1    |
|-------------|---------|------------------|----------|-------|--------------|-------|------|
| <u>'./.</u> |         | ℃                | mg/I     | units | ppt          | umhos | (XIC |
| control     | init    | ial <i>[9. ]</i> | 8.5      | 1924  | 24.1         |       | 7    |
|             | fir     | ial 20.9         | 8.0      | 805   | 24.8         |       | 1    |
| 100         | initi   | al /9./          | 18.5     | 82-   | 24.9         |       | 1    |
| 20          | fin     | al 2019          | 8-1      | 815   | 25.1         |       | İ    |
| 40          | initi   | al 193           | 8.6      | 828   | 24.1         |       |      |
| 10          | fina    | 20.9             | 8.1      | 8.20  | 24.1         |       |      |
| 10          | Initia  | 19,5             | 86       | 927   | 2/           |       |      |
| 60          | fina    | 8.05             | 8.0      | 8-16  | 266          |       |      |
| 80          | initla  | 17.6             | 8.6      | 527   | 2/03         |       |      |
| 00          | fina    | 200              | 7.8      | 8-29  | 27.7         |       |      |
| 100         | initial | 19.8             | 8.7      | \$27  | 24.8         |       |      |
| 100         | final   | 21.0             | 77       | 8 32  | 28-7         |       |      |
|             | initial |                  |          |       |              |       |      |
|             | final   |                  |          |       | <del> </del> |       |      |
| nitials     | W,      | mil              | comments |       | ···          |       |      |
| ate         | 3-2714  | 321.14           |          |       |              |       |      |
| ime         | 1405 1  | 1 (241           |          |       |              |       |      |
| herm. ID    | 19-19   | 01511            |          |       |              | 1     |      |

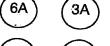
| )  | 1=72/9      | 96 Hrs    | temp   | do       | рĦ       | Sal  | co              | 1         | _      |
|----|-------------|-----------|--------|----------|----------|------|-----------------|-----------|--------|
| /  | <u>'./·</u> |           | ℃      | mg/l     | units    | ppt  |                 |           | (co K) |
|    | control     | initial   | 240    | 8-2      | - 8.18   | 24.1 |                 |           | _ /    |
| •  |             | final     | 21.0   | 7.9      | 8.03     | 34.7 |                 | $\neg$    |        |
|    | 20          | initial   | 240    | 8.4      | 827      | 24.4 |                 | ↰         |        |
|    | 20          | final     | 20.8   | 7.9      | 8.12     | 24.8 |                 | ┪         |        |
|    | 40          | initial   | 20.9   | 8.4      | 827      | 245  |                 | $\exists$ |        |
|    | 70          | final     | 4.05   | 8.1      | 8.20     | 24.9 |                 | ヿ         |        |
|    | 100         | Initial   | 10.9   | 82       | 5,26     | 24.6 | 7               |           |        |
| 1  | 60          | final     | rho    | 8.1      | 8.23     | 73.0 | $\neg \uparrow$ |           |        |
| -  | 80          | initial   | 21.0   | 82       | 825      | 24.2 |                 | $\exists$ |        |
|    |             | final     | CLO    | 8.0      |          | 25.0 |                 | 7         |        |
|    | 1-0         | initial   | 21-0   | 82       | 87X      | 24.2 |                 | 1         |        |
|    | 100         | final     | 240    | 7.9      | 8,28     | 25.i |                 | 7         |        |
|    |             | initial   |        |          |          |      | _               | -         |        |
| L  |             | final     |        |          |          |      |                 | 7         |        |
| Ir | itials      | Wil       | DM f   | comments | <u>-</u> |      |                 | 7         |        |
| D  | ate         | 34143     | -21-14 |          |          |      |                 |           |        |
| Т  | me          | 1400 IV   | 3301   |          |          |      |                 |           |        |
| T  | nerm. ID    | JP1-5)1 C | 2151   |          |          |      |                 |           |        |

| Reviewed by: | <del></del> |
|--------------|-------------|

Study: 4985440

# RANDOMIZATION BOARD TEMPLATES 6x4

## Randomization Template 6x4-A



ЗА

3B

6D

6B

6C

5D

3C

**4B** 

## Randomization Template 6x4-B

5A

2A

5D

3D

6D

4B

6A

3B

5B

2D

## Randomization Template 6x4-C

1B

6C

5A

3A

5D

1D

### Randomization Template 6x4-D

6A

3D

3B

2A

5A

5D

D

5C

6B

6D



**ORGANISM LOG-IN SHEET** 

Date / Time of Receipt: 3-25-14 / 1000

Person Accepting: Tara Gallagher

Organism Source: MB/\_

species: Mysidopsis bahia

Date Born / Age / Lot Number: 3-21-14 / 4 days / MYMBL 032114, 3-18-14 / 7 days / MYMBL 031814

Percent Mortality at Receipt:  $\angle 1\%$ 

Organism Stress at Receipt:

stressed due to:

other

Initial Measurements at Organism Receipt:

Temp (°C): 20.3, 20.3 Salinity (pbt): 18.4, 19.5

DO (mg/L): 20,1,22.5

pH: 7.76, 7.59 Alkalinity (mg/L):

Designated Culture Tank:

Designated Study(s):

Are Parameters within 10% of Intended Culture System:

Date / Time Organisms added to Culture System:

Check for Parasites: + /(-)

Check for Fungal or Bacterial Disease: + //

Were any Prophylactic Treatments used:

Y (explain):

Comments:



**NELAP Certification # E84191** 

## **Shipment Record**

State of Florida Aquaculture Certificate Number AQ0668007

| Species                | Quantity | Age   | Brood/Lot<br>Number | Temp. | рН<br>(S.U.)      | Salinity<br>(º/00) |
|------------------------|----------|-------|---------------------|-------|-------------------|--------------------|
| Americamysis           | 300      | GDAYS | MS 140318           | 25    | 7.9               | 20                 |
| bahia                  | 600      | 30A45 |                     | 25    | 7.9               | 20                 |
| Menidia<br>beryllina   | 550*     | 1     | 55140315            | 25    | 7.9               | 20                 |
| coryuma                |          |       |                     | :     | · · · · · · · · · | Hardness<br>mg/L   |
| Cyprinella<br>leedsi   |          |       |                     |       |                   |                    |
| Pimephales<br>promelas | 800      | <24H5 | FM 140323-1515      | 25    | 7.8               | 80                 |
| Ceriodaphnia<br>dubia  |          |       |                     |       |                   |                    |
| Daphnia                |          |       |                     |       |                   |                    |
| magna                  |          |       |                     |       |                   |                    |
| YCT                    |          |       |                     |       |                   |                    |
| . subcapitata          |          |       |                     |       |                   |                    |



| Study Number:                              | 4985            | 146   |                           | Facility I         | Name or Co                      | de: K/7                                | n-Bu                | C                    |                            |           |                      |
|--|-----------------|---|---------------------------|--------------------|---------------------------------|--|---------------------|----------------------|----------------------------|-----------|----------------------|
| Test Type:                                 | Acute           |   | □Chronic                  |                    | □Sedime                         |  |                     | ompound              | □Other                     |           |                      |
| Sample Number:                             | <b>E</b> D001   | □D002   | □D003                     | <b>□</b> E001      | □E002                           | □E003                                  | , <b>□</b> E004     | □E005                | □E006                      |           |                      |
|  |                 |   |                           |                    | nogenized pi<br>es are homoger  |  |                     | Splits to            | be homog                   | enized:   |                      |
| Description of Samp                        | ole:            | DEffluent                                     | Waters                    |                    | ontact Cooling<br>lwater/pump a |  | □Contact<br>□Other: | Cooling Wa           | er                         |           |                      |
| ocation of Sampling                        | g:              | □Final (po                                    | st treatment)<br>g Waters |                    | □Final-Pre                      | echlorinated                           |                     | □Final-Cl<br>□Other: | nlorinated                 |           | □Outfall Outle       |
| Sample type:                               | ,               | □Grab<br>□Time Pro                            | portional                 |                    | □24 Hour<br>□Flow Pro           | Composite portional                    |                     |                      | Hour Compo<br>ated/Iced in |           |                      |
| Sample Collection:                         |                 | Date/Time Ini                                 | tiated:                   | <del>†:</del>      | <del>,</del>                    |  | Date/Time T         | erminated;           |                            |           |                      |
|  |                 | Was same                                      | oler chain-c              | of-custody         | seal intact a                   | t sample re                            | trieval:            | □Yes                 | □No                        |           |                      |
| /olume of Sample:                          |                 | _Liters / Gal                                 |                           | •                  | Container                       | •                                      |                     | ade Plastic          | □Glass                     | □Stainles | s Steel              |
| torage and Transpo                         | ert Condition   | ns:   | □lced/Cool                |                    | Temp. (°C)<br>sported to Lab    | upon collection                        | on:                 | <br>nt Courier       |                            |           |                      |
| elinquished by Sampler:                    |                 |   | Date                      | Time               | Received By:                    |  | <del></del>         |                      | Date                       | Time      | 7                    |
| elinquished by:                            |                 |   | Date                      | Time               | Received By:                    |  | -,                  |                      | Date                       | Time      | 1                    |
| elinguished by:                            |                 |   | Date                      | Time               | Received By:                    |  |                     | <del></del> .        | Date                       | Time      | 1                    |
| ondition of Sample<br>ample Refrigerated ( | (date/time/s    |   | □Contained                | i                  | □Accepted Sample Da             | ta and Use                             |                     | nised / Explat       | n below                    | □Rejected | J<br>/ Explain below |
|  | itial Sample Da |   |                           |                    | Dates used in                   | Toxicity Test                          |                     | Sample               | <del></del>                | Sample T  | erminated            |
| emp (°C) pH                                | D.O. (mg/L)     | Cond./Sal*                                    | TRC (ppm)                 | Da                 | ite(s)                          | Time                                   | e(s)                | Split ID             |                            | Date      | Time                 |
| छ। ४०५                                     | /8              | 10,090  | (D·                       |                    |                                 |  |                     |                      |                            |           |                      |
| Salmit                                     | y = 2           | 10,090<br>5.6pp                               | r                         |                    |                                 | ······································ |                     |                      |                            |           |                      |
| nductivity measured in um                  |                 |   |                           | ·                  |                                 | <del></del>                            |                     |                      | L                          |           |                      |
| mple Manipulations:                        |                 | ☐Galted ☐pH Adjusted ☐Aerated/Du ☐Dechlorinat | e to:                     | <b>□</b> Supersatu | ICL<br>iration<br>mgs anhydroi  | □D.O. < 409                            |                     | al D.O. after        | -                          |           | <del></del>          |
| omments:                                   |                 |   | <del>-</del>              |                    | <b>○</b> 11003-150              |  |                     | - h was for          |                            |           |                      |

| 5 | Y |
|---|---|
|   | ĭ |
| - | 1 |
| i | 7 |

| QCL                        |   |  | CHAII                  | V (        |  | CU    | .4                   | TO                | D                | Υ                |                  |          | Lab LIMS N   | No: 4985444 MA                              | TRIX CODES  |
|----------------------------|---|--|------------------------|------------|--|-------|----------------------|-------------------|------------------|------------------|------------------|----------|--------------|---|---|
|                            | Phone: 215-355-3. Fax: 215-355-7. KIW BUC | 1 0  | to/Report to: (if diff |            |  | _ 01  |                      |                   |                  |                  |                  |          |              | Corbic/HCI Vials # HCI Vials                | RINKING WATER<br>ROUND WATER<br>WASTEWATER        |
| Address                    | LANDA                                     | iu san   | npling Site Address    | (if di     | ifferent)  |       |                      |                   |                  |                  |                  |          | # Na<br># HÑ | SU:     | UDGE  |
| City/State/Zip ED1502      | NJ  |  |                        |            | · ·  |       |                      |                   |                  | •                |                  |          |              | SO <sub>4</sub> pH OIL: 0                   | IL<br>ION SOIL SOLID                              |
| Phone/Fax                  |   | P.C  | ). No.                 | _          |  |       |                      |                   |                  |                  |                  |          | # Un         | preserved                                   | SCELLANEOUS                                       |
| Client Contact GLEYN (     | ries                                      | QC   | Contact                |            |  |       |                      |                   |                  |                  |                  |          | # Hc         | IpH   |   |
| PROJECT                    |   |  | Collection             | G C<br>R O | Matrix   |       | Nun                  | ber o             | Con              | tainer           | 3                | ].       | # Ter        | mp control ID#                              |   |
| A FIELD ID                 |   | Date 3-23  | Military Time          | A M<br>B P | Code   | Total | H <sub>2</sub><br>So | H Y C a l         | O <sub>3</sub> H | Z<br>n<br>A<br>c | B<br>a<br>C<br>T | Ì        |              | 1 leiu p                                    | H, Temp (C or F),<br><sub>2</sub> , S. Cond. etc. |
| EFFLUENT DISCH             | ARGE                                      | 3-24   |                        | X          | Ull  |       |                      |                   | 1                | Щ                |                  |          | BIOA         | 55Ac/                                       |   |
|                            |   |  |                        |            |  |       |                      |                   |                  |                  |                  |          |              |   |   |
|                            |   |  |                        |            |  |       |                      |                   |                  |                  |                  |          |              |   |   |
| (1) 1<br>한 경<br>(2) 2)     |   |  |                        |            |  |       |                      |                   |                  |                  |                  |          |              |   |   |
|                            |   |  |                        |            |  |       |                      |                   |                  |                  | П                |          | ,            |   |   |
|                            |   |  |                        |            |  |       | 1                    | 1                 |                  | T                |                  |          |              |   |   |
|                            |   |  |                        | $\top$     | <del>                                     </del> |       | +                    | $\dagger \dagger$ | +                | ++               | H                | +        |              |   |   |
|                            |   | <del>                                     </del> |                        | +          |  |       | +                    | ++                | +                | +-               | +                | ╁        | <del></del>  |   |   |
|                            |   |  |                        | +          | -  | -     | +                    | +                 | +                | +                | ╁┼               | +        | ·            |   | <u></u> . <u></u>                                 |
|                            | and the second                            | -  |                        | +          | -  |       | +                    | +                 | +                |                  | $\dashv$         |          |              |   |   |
| SAMPLED BY: (Name/Company) | ······································    |  |                        | Ш.         |  |       |                      |                   | $\perp$          |                  | Ш                | <u> </u> |              | atic.                                       |   |
| Vei                        | bal/fax data due:<br>dcopy due:           | <u></u>  |                        |            | ort For<br>Standar                               |       |                      |                   |                  |                  |                  | Diel     | ,            | Field Parameters Analyzed By                |   |
| P(C)                       | ase call for pricing ar                   | d availahili                                     | ity on rush /~14-2     |            | <del></del>                                      |       |                      |                   |                  |                  |                  |          |              | Sig: Date/T                                 | me:   |
|                            |   |  |                        |            |  |       |                      |                   |                  |                  |                  |          |              | TARY TIME (24 HOUR CLOCK, I.E. 8AM IS 0800, |   |
| RELINQUISHED BY SAMPLER    | DAIL                                      | VIE I  | RECEIVED BY            |            |  | ~     | ΛL.                  | SiG               |                  | ATE              |                  |          | TIME         | DELIVERY METHOD: MICCOURIER CLOURIER        | 4 PM IS 1600)                                     |
| 1 Alley Clex               | 3-24-14                                   | 1700   | 1 Center               | _          | <u>ک</u> -                                       | 3     |                      |                   | Ţ,               | <u>3-2</u>       | <u>) y.</u>      | (५       | 1700         | DELIVERY METHOD: TO COURIER CLIENT C        | 3,24-14   |
| RELINQUISHED BY SAMPLER  1 | 3-24-14 THE SUSTIN                        | ME<br>700  | RECEIVED BY            | 1          |  |       |                      |                   | E                | 35               | 5"               | 14       | TIME<br>700  | COMMENTS:                                   |   |
| RELINQUISHED BY            | DATE TH                                   | ME   | RECEIVED BY            |            |  |       |                      |                   | _                | ATE              |                  |          | TIME         |   |   |
| RELINQUISHED BY            | DATE TI                                   | ME   | RECEIVED BY            |            |  |       |                      |                   | r                | ATE              |                  |          | TIME         |   |   |
| 4 .                        |   |  | 4                      |            |  |       |                      |                   |                  | ., ., .          |                  |          | 1            |   | , 1   |
| RELINQUISHED BY<br>5       | DATE TI                                   | ME   | RECEIVED BY<br>5       |            |  |       |                      |                   |                  | ATE              |                  |          | TIME         | Hazardous: yes/no $400$ ATAS                | luen  |



| Study Number:                               | 49854                           | 460                     |                            | Facility N   | Name or Co                    | de: <i>K1</i> 7     | 7-BUC                                  | <u>,</u>             |                               |             |                          |
|---|---------------------------------|-------------------------|----------------------------|--------------|-------------------------------|---------------------|--|----------------------|-------------------------------|-------------|--------------------------|
| Test Type:                                  | <b>E</b> Acute                  |                         | ©Chronic                   | :            | □Sedime:                      | nt                  | □Pure Co                               | mpound               | □Other                        |             |                          |
| Sample Number:                              | □D001                           | □D002                   | □D003                      | E E001       | □E002                         | □E003               | , □E004                                | □E005                | □E006                         |             |                          |
|   | e is compris<br>plit, assign A, | -                       | _                          |              |                               |                     |  | Splits to            | be homoge                     | enized:     |                          |
| Description of Sam                          | ple:                            | EEffluent<br>□Dilution  | Waters                     |              | ntact Cooling<br>water/pump a |                     | □Contact<br>□Other:                    | Cooling Wat          | ter                           |             |                          |
| Location of Samplin                         | ng:                             | EFinal (po<br>□Receivir | ost treatment<br>ng Waters | )            | OFinal-Pro                    | echlorinated        |  | □Final-Cl<br>□Other: | nlorinated                    |             | □Outfal  Outlet          |
| Sample type:                                |                                 | □Grab<br>□Time Pro      | oportional                 |              | □24 Hour<br>□Flow Pro         | Composite portional |  |                      | Hour Compos<br>ated/Iced in F |             |                          |
| Sample Collection:                          |                                 | Date/Time In            | itiated:                   |              |                               | -                   | Date/Time Te                           | erminated:           |                               |             |                          |
|   |                                 | Was sam                 | pler chain-                | of-custody s | seal intact a                 | it sample re        | trieval:                               | □Yes                 | □No                           | ·           |                          |
| Volume of Sample:                           |                                 | _Liters / Ga            | llons                      |              | Container                     | Type:               | □FDA Grad                              | de Plastic           | □Glass                        | ☐Stainles   | s Steel                  |
| Storage and Transp Relinquished by Sampler: | ort Conditio                    | ns:                     | □lced/Cod<br>□Field Col    |              | Temp. (°C) ported to Lab      | upon collection     | on:Overnight                           | t Courier            | Date 3.25.14                  | Time        | 7                        |
| Relinquished by:                            |                                 | ·                       | Date                       | Time         | Received By:                  |                     | ····                                   | <del></del>          | Date                          | 7 <i>00</i> | -                        |
| Relinquished by:                            | · <del>·</del>                  |                         | Date                       | Time         | Received By:                  |                     | ······································ | <del></del>          | Däte                          | Time        |                          |
| Condition of Sample                         | •                               | •                       | □€ontaine                  | d            | ☐Accepted                     |                     | □Comprom                               | ised / Explai        | ń below                       | □Rejected   | .il<br>I / Explain below |
|   | <del></del>                     |                         |                            |              | Sample Da                     | ta and Use          | <u> </u>                               |                      |                               |             |                          |
| temp (°C) pH                                | nitlal Sample Da<br>D.O. (mg/L) | ata<br>Cond./Sal*       | TRC (ppm)                  | Dat          | Dates used in<br>te(s)        | Toxicity Test       | e(s)                                   | Sample<br>Split ID   |                               | Sample ate  | Terminated<br>Time       |
| 5.0 8.18                                    | 10.5                            | 9780                    | 6.1                        | 3-25,1       | 4                             | 1350                |  |                      | 326.                          |             | 800                      |
| otes:                                       | <b></b>                         |                         |                            |              |                               |                     |  |                      |                               | ·           |                          |
|   | <u></u>                         | <del> </del>            | ليجبب                      |              |                               |                     |  |                      |                               |             |                          |
| Conductivity measured in u                  |                                 |                         | •                          |              |                               |                     | •                                      |                      |                               |             |                          |
| ample Manipulation                          | <b>.</b>                        | ©Galted<br>□pH Adjuste  | id                         | mL's 0.1 N H | ICL                           | ,                   | nL's 0.1 N Na                          | aOH.                 |                               | □Final pH_  |                          |
|   |                                 | □Aerated/Dt             |                            | □Supersatu   |                               | <br>□D.O. < 40%     |  |                      | aeration:                     |             | L                        |
|   |                                 | □Dechlorina             | ted                        | •            |                               | us sodium thi       |  |                      |                               |             |                          |

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| QCL                            |  |  | CHAIN                      |              | F, C           |          | ST       | ·O   | D١                | <b>Y</b>        |              | Lab LIMS N      | No: 4985446  | MATRIX CODES                                       |
|--------------------------------|--|--|----------------------------|--------------|----------------|----------|----------|--|-------------------|-----------------|--------------|-----------------|--|--|
| Southampton, PA 18966-0514     | Phone: 215-355-390<br>Fax: 215-355-723 | 31   | /Report to: (if differ     |              |                |          | <u> </u> |  |                   |                 |              | 1               | scorbic/HCI Vials # HCI Vials  | DW: DRINKING WATER GW: GROUND WATER WW: WASTEWATER |
| Client/Acct. No. A50032        |  |  | ·                          |              |                |          |          |  |                   |                 |              |                 | a <sub>2</sub> S <sub>2</sub> O <sub>3</sub>   | 1  |
| Address                        | LAMORI                                 | Sampli   | ling Site Address:         | (if diffe    | rent)          |          |          | <u></u>                                      |                   |                 |              | # Na            | a OH/Zn acetate pH   | SO: SOIL   |
|                                |  |  |                            |              |                |          |          |  |                   |                 |              |                 | NO <sub>3</sub> pH.  | ľ  |
| City/State/Zip En (Se)         | NS                                     |  | •                          |              | 75.            |          |          |  |                   |                 |              |                 | S0 <sub>4</sub> ·pH  | OIL: OIL   |
| Phone/Fax                      |  | P.O. N   | No.                        |              |                |          |          |  |                   |                 |              | 1               | iOHipH   | SOL: NON SOIL SOLID                                |
| Client Contact G LENW (        | GRUER                                  |  | Contact                    |              |                |          |          |  |                   |                 |              | # Hc            | ipreserved   | MI: MISCELLANEOUS                                  |
| PROJECT                        | <u></u>                                | T  |                            | G C T        |                |          | Numb     | per of (                                     | Conta             | ainers          |              | # Te            | mp control 10#   | X: OTHER   |
|                                |  |  | 1                          | G C<br>R O N | Matrix<br>Code | Т        | н, н     | Ϋ́́н   | ı N               | z W             | B            |                 | and by the section has   | Field pH, Temp (C or F),                           |
| FIELD ID                       |  | Date   | B I                        | ВР           |                | Total    | 8 C      | 3 0<br>5                                     | ů<br>3 H          | A P             | ç T          |                 | ANALYSIS REQUESTED   | DO, Cl <sub>2</sub> , S. Cond. etc.                |
| Efficient DIS                  | CHARGE                                 | 3-25-14  | 1100                       | XI           | hul            | <u> </u> | _        |  |                   |                 |              | BIOA            | 55AY   |  |
|                                |  |  |                            |              |                |          | П        | П  |                   |                 |              |                 |  |  |
|                                |  |  |                            |              |                |          | +        |  | 11                | $\top$          |              |                 |  |  |
|                                |  | +  | 1                          | ++           |                | -        | +        | ++-  | +                 | ++              | +            |                 |  | ·  |
|                                |  | -  | +                          | ++           |                | -        | +-       | $\vdash \vdash$                              | $\dashv$          | $\dashv$        | +            | <u> </u>        |  |  |
|                                |  | <b>_</b>   |                            | +            | $\dashv$       | $\dashv$ | $\perp$  | 4  | $\coprod$         | 11              | Щ'           | ·               |  |  |
|                                |  |  |                            |              |                |          |          |  |                   |                 |              |                 |  |  |
| (6)<br>3                       |  |  |                            | 1.           |                |          |          |  |                   | 1               |              |                 |  |  |
|                                |  |  |                            | 1            |                | 1        | +1       | 一  | $\dagger \dagger$ | $\top$          |              |                 |  | <del></del>  |
|                                |  | <del>                                     </del> | +                          | ++           | -              | $\dashv$ | +        | $\vdash$                                     | ++                | +               | +            |                 |  | :  |
|                                | 4-                                     | <del>                                     </del> | +                          | +            | $\rightarrow$  | $\dashv$ |          | $\vdash$                                     | ++                | $\dashv \vdash$ |              |                 |  |  |
| SAMPLED BY: (Name/Company)     |  |  |                            | Щ            |                |          | $\perp$  | Щ  |                   |                 |              |                 | The state of the s |  |
| ) ver                          | rbal/fax data due:                     |  |                            | Report       |                |          |          |  |                   |                 |              |                 | Field Parameters Anal  |  |
|                                | rdcopy due:/_                          | /_   |                            | ☐ Star       |                |          |          |  |                   |                 |              |                 | Sig:   | Date/Time:   |
| SAMPLE CUSTORY EXCHANGE        | ease call for pricing and              | availability (                                   | on rush (<14-21            | day) ti      | urnaro         | und a    | nd oi    | n ali l                                      | but s             | tanda           | ırd foı      | mat.            |  |  |
| RELINQUISHED BY SAMPLER        | DATE TIME                              |  | D BELOW: U.<br>RECEIVED BY |              |                | LEG/     | AL S     | IGN  | ATI               | URE             | , DA         | TE AND MILE     | TARY TIME (24 HOUR CLOCK, I.E. 8AM)  | 0800, 4 PM IS 1600)                                |
| 1 Chlestles                    | 3-25-14 11                             |  |                            | /r           | 1              | 7        |          |  |                   | ATE<br>ス. っ.    | C.A          | TIME<br>4 1600  | DELIVERY METHOD: TOC COURIER CLIEN UPS FEDEX OTHER   | T Custody Seal Number                              |
| 1 Chlestiles RELINQUISHED BY 2 | DATE TIME                              | E R  | RECEIVEDIBY                | Va           | <u> </u>       |          |          |  | ĎĄ                |                 | <u>) ~ L</u> | TIME            | COMMENTS:  | 3.25.4   |
| RELINQUISHED BY                | DATE TIME                              |  | RECEIVED BY                | `            | _              |          |          | =  | ¥ë                | <u>5 4</u>      | 69           | Y TIME<br>Y 700 | -  |  |
| 3                              |  | 3  |                            | _            |                |          |          |  | UA                | ATE             |              | TIME            |  |  |
| RELINQUISHED BY                | DATE TIME                              |  | RECEIVED BY                |              |                |          |          |  | DA                | ATE             |              | TIME            | 1  |  |
| RELINQUISHED BY                | DATE TIME                              | 4  | RECEIVED BY                |              |                |          |          | <u>.                                    </u> | +                 |                 |              |                 | _  | , F  |
| 5                              |  | 5  |                            |              |                |          |          |  | J.                | ATE:            |              | TIME            | Hazardous: yes / no  | T/AS/USO   |

For example to aid completion, see reverse side.



| Study Number:               | 49854                              | 46                   |                            | Facility N         | lame or Coo                    | de: Kr                | n-Bu           | C                                      |                                 |                                       |                 |
|-----------------------------|------------------------------------|----------------------|----------------------------|--------------------|--------------------------------|-----------------------|----------------|--|---------------------------------|---------------------------------------|-----------------|
| Test Type:                  | □ Acute                            |                      | <b>□</b> Chronic           | <b>:</b>           | □Sedimer<br>/                  | nt                    | □Pure Co       | mpound                                 | □Other □                        |                                       |                 |
| Sample Number:              | □D001                              | □D002                | <b>□</b> D003              | □E001              | <b>□</b> E002                  | □E003                 | , □E004        | □E005                                  | □E006                           |                                       |                 |
|                             | le is compris<br>plit, assign A, E |                      |                            |                    | -                              |                       |                | Splits to                              | pe homodei                      | nized:                                |                 |
| Description of Sam          | ple:                               | Effluent<br>Dilution | Waters                     |                    | ntact Cooling<br>water/pump ar |                       | □Contact o     | Cooling Wat                            | er                              |                                       |                 |
| Location of Samplin         | ng:                                | EFinal (po           | est treatment)<br>g Waters | ·····              | DFinal-Pre                     | chlorinated           |                | □Final-Ch                              | lorinated                       |                                       | □Outfall Outlet |
| Sample type:                |                                    | □Grab<br>□Time Pro   | pportional                 |                    | EFlow Pro                      | •                     |                |  | lour Composi<br>ated/iced in Fi | •                                     |                 |
| Sample Collection:          |                                    | Date/Time In         | tiated;                    |                    |                                |                       | Date/Time Te   | rminated:                              | <del></del>                     | · · · · · · · · · · · · · · · · · · · |                 |
|                             |                                    | Was sam              | pler chain-c               | of-custody s       | seal intact at                 | t sample re           | trieval:       | □Yes                                   | □No                             | ·                                     |                 |
| Volume of Sample:           |                                    | Liters / Ga          | llons                      |                    | Container                      | Type:                 | □FDA Grad      | de Plastic                             | □Glass                          | □Stainless                            | Steel           |
| Storage and Transp          | ort Condition                      | ıs:                  | □lced/Coo                  |                    | Temp. (°C) i                   | apon collectio        | on:            | : Courier                              |                                 |                                       |                 |
| Relinquished by Sampler:    |                                    |                      | Date                       | Time               | Received By:                   | W.                    |                |  | Date 3.11/4                     | 700                                   |                 |
| Relinquished by:            |                                    |                      | Date                       | Time               | Received By:                   |                       | <del></del>    | ······································ | Date                            | Time                                  |                 |
| Relinquished by:            |                                    |                      | Date                       | Time               | Received By:                   |                       |                | <u> </u>                               | Date                            | Time                                  |                 |
| Condition of Sample         | upon Recei                         | pt:                  | <b>ĢC</b> ontained         |                    | □Accepted                      |                       | □Compromi      | ised / Explair                         | n below                         | □Rejected /                           | / Explain below |
| Sample Refrigerated         | (date/time/s                       | ig. <u>)</u> :       |                            |                    |                                |                       |                |  |                                 |                                       |                 |
|                             |                                    |                      |                            |                    | Sample Dat                     | ta and Use            | !              | 1. 479                                 |                                 |                                       |                 |
| temp (°C) pH                | nitial Sample Da<br>D.O. (mg/L)    | ta<br>Cond./Sal*     | TRC (ppm)                  | Dat                | Dates used in<br>e(s)          | Toxicity Test<br>Time | a(e)           | Sample                                 | Da                              | Sample To                             | •               |
| 5,0829                      | 11.4                               | 10,030               | 10.1                       | 326.               |                                | 1345                  | 5(3)           | Split ID                               | 3-27-1                          |                                       | Fime<br>SW      |
| lotes:                      | <u> </u>                           |                      |                            | <del></del>        |                                |                       |                |  | <del></del>                     |                                       | <del></del>     |
|                             |                                    | <u> </u>             |                            |                    |                                |                       |                |  |                                 |                                       |                 |
| Conductivity measured in ur | nhos; salinity me                  | easured in o/oo      |                            | 2                  |                                |                       |                |  |                                 |                                       |                 |
| sample Manipulations        | s: ,                               | Z Salted             |                            |                    |                                |                       |                |  |                                 |                                       |                 |
| -                           |                                    | □pH Adjuste          | d r                        | nL's 0.1 N H       | CL                             | r                     | nL's 0.1 N Na  | OH                                     |                                 | DFinal pH                             |                 |
|                             |                                    | □Aerated/Du          |                            | <b>□</b> Supersatu |                                |                       | of Sat. / fina |  |                                 | mg/L                                  | •               |
|                             | ı                                  | Dechlorina           | ed -                       |                    | mgs ạnhydrou                   | s sodium thi          | osulfate used  | per liter (sh                          | ow math belo                    | w or back)                            |                 |

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| QCL   | 7                                |            | CHAIN OF CUSTODY |                   |          |              |                |       |             |            |                    |                        |      | Lab LIMS N                            | No:                        | MATRIX CODES   |                         |  |
|---|----------------------------------|------------|------------------|-------------------|----------|--------------|----------------|-------|-------------|------------|--------------------|------------------------|------|---------------------------------------|----------------------------|--|-------------------------|--|
| 1205 Industrial Blvd. Southampton, PA 18966-0514 Client/Acct. No. | Phone: 215-355-<br>Fax: 215-355- | 7231       | Bill to/Re       | port to: (if diff |          |              | _ 01           |       |             |            | ,                  |                        |      |                                       | corbi                      | ic/HCl Vials #_  |                         | DW: DRINKING WATER GW: GROUND WATER WW: WASTEWATER |
| Address   | LANDE                            | ~ < .      | Sampling         | Site Address      | s: (if c | lifferent)   |                |       |             |            |                    |                        | 1    | # Na                                  | OH/                        | <sup>)</sup> 3<br>Zn acetate pH<br>oH.   |                         | SO: SOIL SL: SLUDGE                                |
| City/State/Zip Epilser  | , par                            |            |                  |                   |          | A            |                |       |             |            |                    | · ·                    | -    | # H <sub>2</sub>                      | 80 <sub>4  </sub><br>10H p | pH   |                         | OIL: OIL<br>SOL: NON SOIL SOLID                    |
| Phone/Fax  Client Contact   | 60.00                            |            | 20. No           |                   |          | · ·          |                |       |             |            |                    |                        |      | # Un                                  |                            | and the second s |                         | MI: MISCELLANEOUS                                  |
| PROJECT   | GIELES                           | - 10       | Colle            | ection            | G (      | :            | Г              | Num   | ber of      | f Con      | tainer             |                        |      | #Ho                                   | mp.cs                      | ontrol ID#   |                         | X: OTHER   |
| A FIELD ID  | And And                          | , D        |                  | Military Time     | R   C    | )   Matrix   |                |       | y<br>a<br>s |            |                    |                        |      |                                       |                            |  |                         | Field pH, Temp (C or F),                           |
| 2.73  | 211 - 255                        | 3.2        | 514              | 400               |          | /            | 10             | Q i   | T<br>s      | 03 H       | Ĉ                  | a<br>C<br>T            |      |                                       |                            | ALYSIS REQU  | ESITED.                 | DO, Cl <sub>2</sub> , S. Cond. etc.                |
| BFFL VENT DIS   | CHAILCE                          | 3.2        | 6-14             | 1100              | ^        | (lul)        | 1              |       | +           | +          | $\vdash$           | +                      | +    | Bisa                                  | 42 7                       | Acq  |                         |  |
| 10 m  |                                  |            |                  |                   | H        | <del> </del> |                |       | +           | +          | +                  | +-                     | +    | · · · · · · · · · · · · · · · · · · · |                            |  |                         | · · · · · · · · · · · · · · · · · · ·              |
| 97 <u> </u>   |                                  |            | -                |                   | $\vdash$ | -            |                | _     | $\dashv$    | _          | $\dashv$           | 44                     | -    |                                       |                            |  |                         |  |
|   |                                  |            | $-\downarrow$    | <del></del>       | -        |              |                | _     |             | _          | $\perp \downarrow$ | $\dashv$               | 4    |                                       |                            | <del></del>  |                         |  |
|   |                                  | _          |                  |                   | 1        | ļ            |                | _     | $\parallel$ | +          |                    | $\downarrow\downarrow$ | 1    |                                       |                            |  |                         |  |
|   |                                  |            |                  |                   |          | ļ            |                | _     |             | lacksquare |                    | $\coprod$              |      |                                       |                            |  |                         |  |
|   |                                  |            |                  | ,                 |          |              |                |       |             |            | Ш                  |                        |      | ·                                     |                            |  |                         |  |
| [AN]  |                                  |            |                  |                   |          |              |                |       |             |            |                    | Ш                      |      |                                       |                            |  |                         |  |
|   |                                  |            |                  |                   |          | :            |                |       |             |            |                    |                        |      |                                       |                            |  |                         |  |
|   |                                  | ·          |                  |                   |          |              |                |       |             |            |                    |                        |      |                                       |                            |  |                         |  |
| SAMPLED BY: (Name/Company)  | Verbal/fax data due:             |            |                  |                   |          | port For     |                |       |             |            |                    |                        |      |                                       |                            |  | Field Parameters Analyz | ed By:   |
| ASIRC   | Hardcopy due:                    |            | <u>-/-</u>       |                   |          | Standard     |                |       |             |            |                    |                        |      |                                       |                            | Sig:   |                         | Date/Time;   |
| SAMPLE CHSTODY EXCHAN   | Please call for pricing a        | and availa | bility or        | rush (<14-2       | 1 da     | y) turnai    | ound a         | and d | on all      | but.       | stand              | dard f                 | form | nat.                                  |                            |  |                         |  |
| SAMPLE CUSTODY EXCHAIN RELINQUISHED BY SAMPLER                    | 7   DAIE     1                   | IME        | RE               | CEIVED BY         | JSE      | - C          |                | ΑL    | SIG         | NA<br>D    | OATE               | E, D                   | ĄΤ   | E AND MILI                            | TAR                        | Y TIME (24 HOUF  | CLOCK, I.E. 8AM IS      | 0800, 4 PM IS 1600)                                |
| RELINQUISHED BY   |                                  | 1700       |                  | ceole             |          |              | <u> </u>       |       |             | - 1        | 3.2                |                        | ч    | - 17172-                              |                            | UPS   FEDEX  |                         | 3.26.14  |
| 2   |                                  | 1ME<br>700 | ) HE             | CEIVED BY         | 1        | ~            |                |       |             |            | ATE<br>32          | -<br>m:/               | ù    | 700                                   | cc                         | MMENTS:  |                         |  |
| RELINQUISHED BY 3   | DATE T                           | IME        |                  | CEIVED BY         |          |              |                |       |             |            | ATE                |                        |      | TIME                                  | 1                          |  |                         |  |
| RELINQUISHED BY   | DATE T                           | IME        | 3<br>RE          | CEIVED BY         |          | ٠,           | <del>_</del> - |       |             |            | ATE                |                        |      | TIME                                  | -                          |  | **                      |  |
| RELINQUISHED, BY  | DATE                             |            | 4                | )                 |          |              |                |       |             |            |                    |                        |      | 1                                     | 1                          |  | ;                       | , , ,  |
| 5   | DATE T                           | IME:       | 5<br>5           | CEIVED BY         |          |              |                |       |             | P          | ATE                |                        |      | TIME                                  | Ha                         | zardous: yes / no  | 202 AT                  | as luga  |
|   |                                  |            |                  | For exai          | npl      | e to a       | id c           | om    | ple         | tio        | n, s               | ee                     | re   | verse side                            | e.                         |  | J - VIV                 | 70 0000  |



| Study Number:                                | 4985                                    | 4460              |                          | Facility N           | lame or Cod                    | de: <i>KIT</i>        | n-Bu              | C                  |                                 |                 |                   |
|--|---|-------------------|--------------------------|----------------------|--------------------------------|-----------------------|-------------------|--------------------|---------------------------------|-----------------|-------------------|
| Test Type:                                   | <b>E</b> Acute                          |                   | □Chronic                 |                      | □Sedimer.                      | nt                    | □Puire Co         | mipouind           | <b>□</b> Other                  |                 |                   |
| Sample Number:                               | □D001                                   | □D002             | □D003                    | □E001                | □E002                          | <b>E</b> 003          | , <b>□</b> E004   | □E005              | □E006                           |                 |                   |
|  |   |                   |                          |                      | ogenized pr<br>s are homogen   |                       |                   | Splits to          | be homoger                      | nized:          | ·                 |
| Description of Samp                          | le:                                     | ▼ Effluent        |                          |                      | ntact Cooling<br>water/pump ar |                       | □Contact (        | Cooling Wat        | er                              |                 |                   |
| Location of Sampling                         | <b>g</b> :                              | -                 | ost treatment            | )                    | ©Final-Pre                     | chlorinated           |                   | □Final-Ch          | lorinated                       |                 | Outfall Outlet    |
| Sample type:                                 |   | □Grab<br>□Time Pr | oportional               |                      | ES24 Hour (                    |                       |                   |                    | dour Composi<br>ated/Iced in Fi |                 |                   |
| Sample Collection:                           |   | Date/Time In      | nitiated:                |                      |                                |                       | Date/Time Te      | rminated:          |                                 |                 |                   |
|  |   | Was sam           | pler chain-              | of-custody s         | seal intact at                 | sample ret            | rieval:           | □Yes               | □No                             |                 |                   |
| Volume of Sample:                            |   | _Liters / Ga      | allons                   |                      | Container                      | Туре:                 | □FDA Grad         | le Plastic         | □Glass                          | □Stainless      | Steel             |
| Storage and Transpo                          | rt Condition                            | is:               | □lced/Coo                | ler<br>lected/Transp |                                | upon collectio        | n:<br>☐Overnight  | <br>Courier        |                                 |                 |                   |
| Relinquished by Sampler:                     |   |                   | Date                     | Time                 | Received By:                   | m                     |                   |                    | Date 327/4                      | Time 700        | ]                 |
| Relinquished by:                             | - · . · · · · · · · · · · · · · · · · · |                   | Date                     | Time                 | Received By:                   |                       |                   |                    | Date                            | Time            |                   |
| Relinquished by:                             |   |                   | Date                     | Time                 | Received By:                   | · <u> </u>            |                   |                    | Date                            | Time            |                   |
| Condition of Sample<br>Sample Refrigerated ( | •                                       | •                 | . <del>DCo</del> ntained | <b>1</b>             | □Accepted                      |                       | <b>□</b> Compromi | sed / Explain      | ı below                         | □Rejected /     | / Explain below   |
|  |   |                   | <del></del>              |                      | Sample Dat                     | <del></del>           |                   |                    | ,                               |                 |                   |
| temp (°C) pH                                 | tial Sample Dat<br>D.O. (mg/L)          | ca<br>Cond./Sal*  | TRC (ppm)                | Date                 | Dates used in<br>e(s)          | Toxicity Test<br>Time | (s)               | Sample<br>Split ID | Da                              | Sample Ti<br>te | erminated<br>Time |
| 5.0 829                                      |   | 10,130            | co:1                     | 327.1                | 4                              | 1350                  |                   |                    |                                 | 18.14           | 800               |
| otes:  |   |                   |                          |                      |                                |                       |                   |                    |                                 |                 |                   |
|  |   |                   |                          |                      |                                |                       |                   |                    |                                 |                 |                   |
| onductivity measured in um                   | hos; salinity me                        | easured in o/o    | 6                        |                      |                                |                       |                   |                    |                                 |                 |                   |
| ample Manipulations:                         | : i                                     | Saited            |                          |                      |                                |                       |                   |                    | -                               |                 |                   |
|  | í                                       | □pH Adjustë       | ed i                     | mL's 0.1 N H         | CL                             |                       | L's 0.1 N Na      | он                 | I                               | OFinal pH_      | <del></del>       |
|  |   | Aerated/Du        |                          | □Supersatur          |                                |                       |                   |                    | aeration:                       |                 |                   |
|  | Į.                                      | □Dechlorina       | ted _                    |                      | ngs anhydrou                   | s sodium thic         | sulfate used      | per liter (sh      | ow math below                   | w or back)      | •                 |

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| QCL  |                          |             |              | CHAI                |            | OF          |          |                  |                         | D         | Υ                 |                  |           | Lab LIMS N          | No:         | 4  | 98                 | 54          | 46       |                | IV   | IATRIX COI  | DES         |
|--|--------------------------|-------------|--------------|---------------------|------------|-------------|----------|------------------|-------------------------|-----------|-------------------|------------------|-----------|---------------------|-------------|--|--------------------|-------------|----------|----------------|--|---|-------------|
| 1205 Industrial Blvd. Southampton, PA 18966- |                          | 5-7231      | Bill to/R/   | leport to: (if diff |            |             |          |                  |                         |           | ÷                 | -                |           | <u>LAB USI</u> # As | scorbio     |  |                    |             |          |                | GW   | v: Drinking wa<br>v: Ground Wat<br>v: Wastewate   | TER         |
| Client/Acct. No. Asc                         |                          |             |              |                     |            |             |          |                  |                         |           |                   |                  | 4         | # Na                |             |  |                    |             |          | <del></del> `. |  | : SOIL  | n           |
| Address                                      | LAMORI                   |             | Samplin      | ng Site Address     | : (if c    | lifferent)  | )        |                  |                         |           |                   |                  | _         | # Na<br># HN        |             |  |                    |             |          | <del></del> *  |  | : SLUDGE <sup>*</sup> :                           |             |
|  | -1 -                     |             | <u> </u>     |                     |            |             |          |                  |                         |           |                   |                  | _         | # H <sub>2</sub>    | .S0∡ n      | п<br>Н   |                    |             |          | <del></del>    | 1  | .: OIL  |             |
| City/State/Zip                               | 84 N2                    |             | <u> </u>     |                     | <u> </u>   | <del></del> | <u> </u> |                  |                         |           |                   | *                | _         | # Na                | 20H р       | '' <del>''                                  </del> | وم دور بساخ را دمی |             |          |                | 1  | L. NON SOIL SO                                    | al In       |
| Phone/Fax                                    | <u> </u>                 |             | P.O. N       | o                   |            |             |          |                  |                         |           |                   |                  |           | #Un                 |             |  |                    |             |          |                | 1  | : MISCELLANEO                                     |             |
| Client Contact & Le                          | on Gaies                 |             | QC Co        | ontact              |            |             |          |                  |                         |           |                   |                  | į.        | # Hc                |             |  |                    | * 1         |          |                |  | OTHER   | US          |
| PROJECT                                      |                          |             | Coll         |                     | G C        | O Matrix    | x        |                  | 7                       | Con       | ntainers          | :                |           | # Ter               | mp co       | introl   | ĬĎ                 | #           |          |                | .,   |   |             |
| A FIELD ID                                   |                          |             |              |                     | A N<br>B F | M Code      |          | H <sub>2</sub> 1 | t V                     | H N a O   | Z U               | B<br>a<br>C      |           |                     | ANA         | VLYSIS   | REQ                | UEST        | ED       |                |  | d pH, Temp (C o<br>, Cl <sub>2</sub> , S. Cond. e |             |
| EFFLYENT                                     | DISCHARGE                | 3           | 76.19        | 1330                | V          | ( Wh        | 11       |                  | 3                       | ***       |                   |                  |           | BIDA                |             |  |                    |             |          |                | <b>-</b>   |   | ·           |
| *  |                          | <del></del> | 200          | 1370                | ľ          | 1           | <u> </u> |                  | $\dagger \dagger$       | ╁         | ††'               |                  | $\dagger$ | 21011               | 1200        |  | ·                  |             |          |                | +  |   |             |
|  |                          |             |              |                     | $\sqcap$   | <b> </b>    |          |                  | $\dagger \dagger$       | $\dagger$ | $\dagger \dagger$ | $\dagger\dagger$ | +         |                     |             |  |                    |             |          |                | +-   |   | <del></del> |
| (48)<br>NSA                                  |                          |             |              |                     | $\vdash$   | +           |          |                  | $\forall$               | +         |                   | +                | +         | <u> </u>            |             |  |                    |             |          |                | +  |   |             |
|  |                          |             |              |                     | $\vdash$   | +           | -        | +                | +                       | +         | ++                | +                | -         |                     | <del></del> |  |                    | <del></del> |          |                | —  |   |             |
|  |                          | _           |              |                     | +          | +           | -        |                  | +                       | +         | $\vdash$          | $\sqcup$         | -         | <del></del>         |             |  |                    |             |          |                |  |   |             |
| 1.0.1<br>1.0.1                               |                          |             |              |                     | $\dashv$   | ┼           | _        |                  | $\downarrow \downarrow$ | _         | 1                 | $\coprod$        | _         |                     |             |  |                    |             |          |                |  |   |             |
|  | <del></del>              |             |              |                     | $\perp$    | ┷           |          |                  | $oxed{\bot}$            |           |                   |                  |           |                     |             |  |                    |             |          |                |  |   |             |
|  |                          |             |              |                     |            |             |          |                  |                         |           |                   |                  |           |                     |             |  |                    |             |          |                |  |   |             |
|  |                          |             |              |                     |            |             |          |                  |                         |           |                   |                  |           |                     |             |  |                    |             |          |                | <del>                                     </del> |   |             |
| -  |                          | :           | ,            |                     |            |             |          |                  | П                       |           |                   |                  | 1.:       |                     |             |  |                    |             |          |                | -  |   |             |
| SAMPLED BY: (Name/Compan                     | Verbal/fax data due:     |             | <i></i>      |                     | Rep        | port For    | rmat: [  | ⊐ St             | anda                    | rd        | □ Fo              | rms              |           |                     |             |  |                    | Field       | Parame   | ters Anal      | vzed   | <br>Bv:   |             |
| AS/QC  | Hardcopy due:            |             | /_           |                     |            | Standar     |          |                  |                         |           |                   |                  |           |                     |             | Sig:   |                    |             |          |                |  | te/Time:  |             |
| - / 0  | i loude dan for prioning | g and avai  | ilability or | n rush (<14-2       | i da       | y) tuma     | round a  | and (            | on all                  | but       | stand             | ard f            | form      | at.                 | ļ           |  |                    |             |          |                | ľ  |   |             |
| SAMPLE CUSTODY EX                            | CHANGES MUST BE I        | DOCUME      | ENTED        | BELOW, U            | JSE        | FULL        | LILEG    | AL               | SIGI                    | NA        | TURE              | E, D             | ΑTE       | AND MILI            | TARY        | TIME (   | 24 HO              | JR CL       | OCK, I.E | E. 8AM I       | S 080  | 0, 4 PM IS 16                                     | 600)        |
| 1 (levelle                                   | 2.27.14                  | 170         | ~            | CEIVED BY           | *          | 2           | 5        |                  |                         | - ∤ ⊍     | SATE              |                  |           | TIME                | DEL         | IVERY ME   | ETHOD:             | Ø¥QC (      | COURIER  | ☐ CLIEN        | IT   | Custody Seal Nu                                   | ımber       |
| RELINQUISHED BY                              | DATE 28.14               | TIME 700    | RE           | CEIVED BY           | ー          |             | _        |                  |                         |           | ATE<br>37         |                  |           | TIME                |             | PS D F   |                    | LI OTI      | HER      |                |  | 3.27.1  | 14          |
| RELINQUISHED BY                              | DATE                     | TIME        | / 2<br>BF    | CEIVED BY           |            |             |          |                  |                         |           |                   | <u>y 1</u>       | <u>Y</u>  |                     | 00,         | MINITER 1  | O.                 |             |          |                |  | •   |             |
| 3<br>DELINOUSCUED BY                         |                          |             | 3            | _                   |            |             |          |                  |                         | ا ا       | ATE               |                  |           | TIME                |             |  |                    |             |          |                |  |   |             |
| RELINQUISHED BY 4                            | DATE                     | TIME        | RE<br>4      | CEIVED BY           |            |             |          |                  |                         | D         | ATE               |                  |           | TIME                | 1           |  |                    |             |          |                |  |   |             |
| RELINQUISHED BY                              | DATE                     | TIME        |              | CEIVED BY           |            |             |          |                  |                         | +         | ATE               |                  |           | TIME                | -           | •  |                    |             |          | ام             | 1  | )'  | • :         |
| 5  |                          | L           | 5            |                     |            |             |          |                  |                         | $\perp$   |                   |                  |           | . IIVIL             | Haz         | ardous:  | yes / r            | no          | 38       | CLAT           | TA   | slues   | . ,         |



| Study Number:              | 49854                                     | 40                      |                           | Facility I    | Name or Coo                   | te: Kr                | 1-Buc               |                     |                                |              |                    |
|----------------------------|---|-------------------------|---------------------------|---------------|-------------------------------|-----------------------|---------------------|---------------------|--------------------------------|--------------|--------------------|
| Test Type:                 | <b>D</b> Acute                            |                         | □Chronic                  |               | ⊒Sedimer                      |                       | □Pure Co            |                     | □Other                         |              |                    |
| Sample Number:             | □D001                                     | □D002                   | □D003                     | <b>□</b> E001 | □E002                         | □E003                 | , <b>DE</b> 004     | □E005               | <b>□</b> E006                  |              |                    |
|                            |   |                         |                           |               | ogenized pri                  |                       |                     | Splits to           | be homoge                      | nized:       | •                  |
| Description of Samp        | ole:                                      | Effluent Dilution       | <b>Vaters</b>             |               | ntact Cooling water/pump ar   |                       | □Contact<br>□Other: | Cooling Wa          | ter                            |              |                    |
| Location of Samplin        | g:  | EFinal (po<br>□Receivin | st treatment)<br>g Waters |               | □Final-Pre                    | chlorinated           |                     | □Final-C<br>□Other: | hlorinated                     |              | □Outfall Outlet    |
| Sample type:               |   | DGrab<br>□Time Pro      | portional                 |               | 1924 Hour C                   | •                     |                     |                     | Hour Compos<br>rated/iced in F |              |                    |
| Sample Collection:         |   | Date/Time Ini           | tiated:                   |               |                               |                       | Date/Time Te        | rminated:           |                                | -            |                    |
|                            |   | Was samp                | oler chain-c              | f-custody     | seal intact at                | sample re             | I<br>trieval:       | □Yes                | □No                            |              |                    |
| Volume of Sample:          |   | Liters / Gal            | lons                      |               | Container                     | Type:                 | □FDA Gra            | de Plastic          | □Glass                         | □ Stainles   | s Steel            |
| Storage and Transpo        | ort Condition                             | is:                     | □lced/Cool<br>□Field Coll |               | Temp. (°C) u<br>ported to Lab |                       | on:<br>□Overnight   | Courier             |                                |              |                    |
| lelinquished by Sampler:   |   |                         | Date                      | Time          | Received By:                  | 11-                   |                     |                     | Date 3-28-14                   | 700          | 7                  |
| lelinquished by:           |   |                         | Date                      | Time          | Received By:                  |                       |                     |                     | Date                           | Time         |                    |
| lelinquished by:           |   |                         | Date                      | Time          | Received By:                  | ``                    | <del></del>         |                     | Date                           | Time         | 1.                 |
| ondition of Sample         | upon Recei                                | pt:                     | <b>⊠</b> Comained         |               | □Accepted                     |                       | □Comprom            | ised / Explai       | n below                        | □Rejected    | / Explain below    |
| ample Refrigerated         | (date/time/s                              | ig.):                   |                           |               |                               |                       |                     |                     |                                |              |                    |
|                            |   | <del> </del>            |                           |               | Sample Dat                    |                       |                     |                     |                                |              |                    |
| m<br><u>етр (°C)</u> рН    | itial Sample Da<br>D.O. (mg/L)            | ta<br>Cond./Sai*        | TRC (ppm)                 | Dat           | Dates used in<br>e(s)         | Toxicity Test<br>Time | (s)                 | Sample<br>Split ID  | Da                             | . • • •      | Terminated<br>Time |
| 5.0 8.34                   | 9.6                                       | 10,200                  |                           | 328.14        | L                             | 1350                  |                     |                     | 329                            |              | 800                |
| es:                        | <u>'                                 </u> | <u>-</u>                |                           |               |                               |                       |                     |                     |                                |              |                    |
| inductivity measured in um | hos; salinity me                          | easured in 9/00         | <u></u>                   |               | <u>-</u>                      | <del></del> -         |                     | !                   |                                | <del> </del> | <u> </u>           |
| mple Manipulations         | : (                                       | a Salted                |                           |               |                               |                       | •                   |                     |                                |              |                    |
| ·                          |   | □pH Adjusted            | j n                       | nL's 0.1 N H  | CL                            | _ n                   | nL's 0.1 N Na       | юн                  |                                | DFinal pH_   | to an admini       |
|                            |   | □Aerated/Du             |                           | ⊒Supersatu    |                               | ID.O. < 40%           |                     |                     |                                | mg/l         | •                  |
|                            | ı   | Dechlorinate            | ed _                      |               | mgs anhydrou                  | s sodium thic         | sulfate used        | per liter (sh       | ow math belo                   | w or back)   |                    |